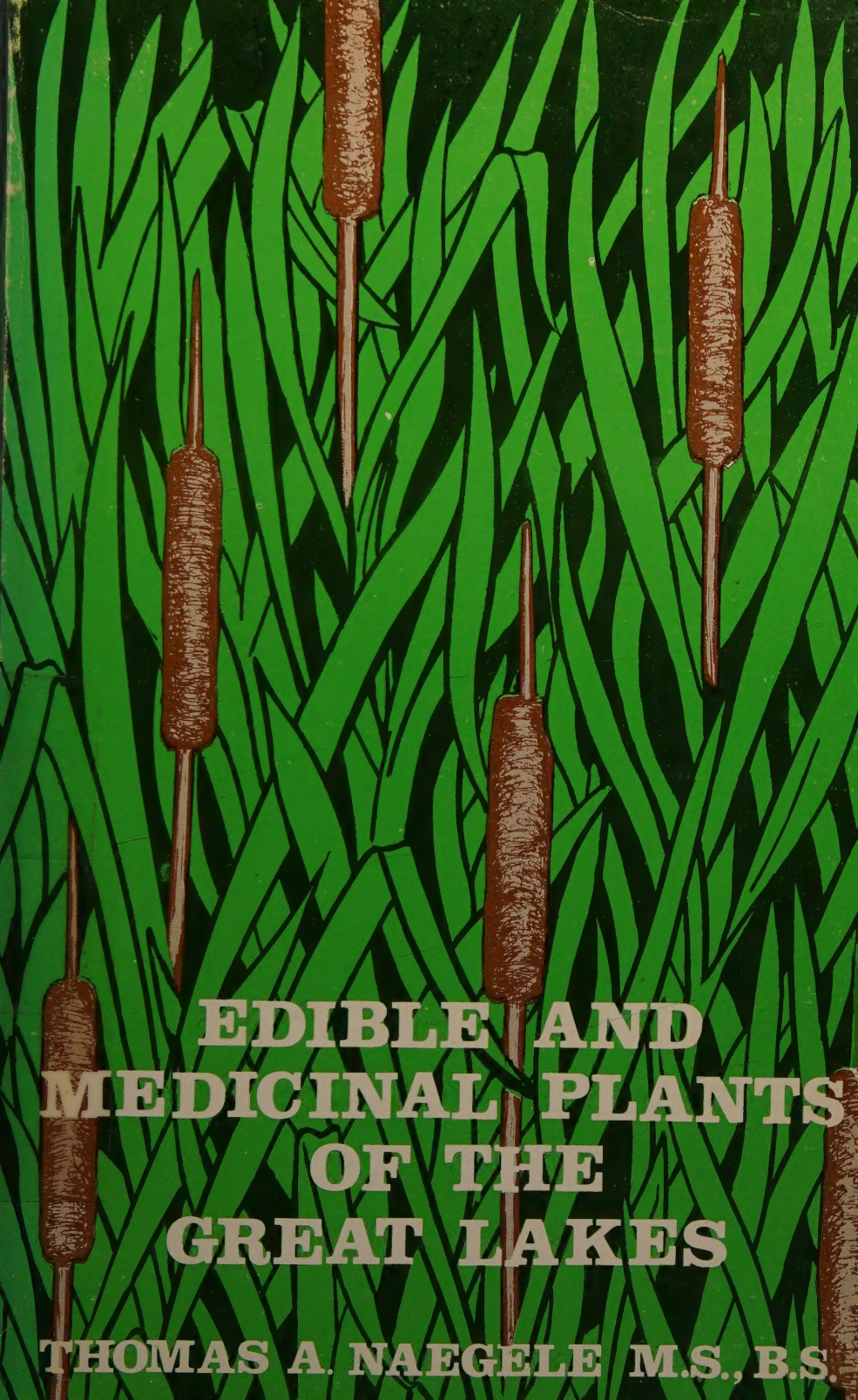

EDIBLE AND MEDICINAL PLANTS OF THE GREAT LAKES

THOMAS A. NAEGELE M.S., B.S.

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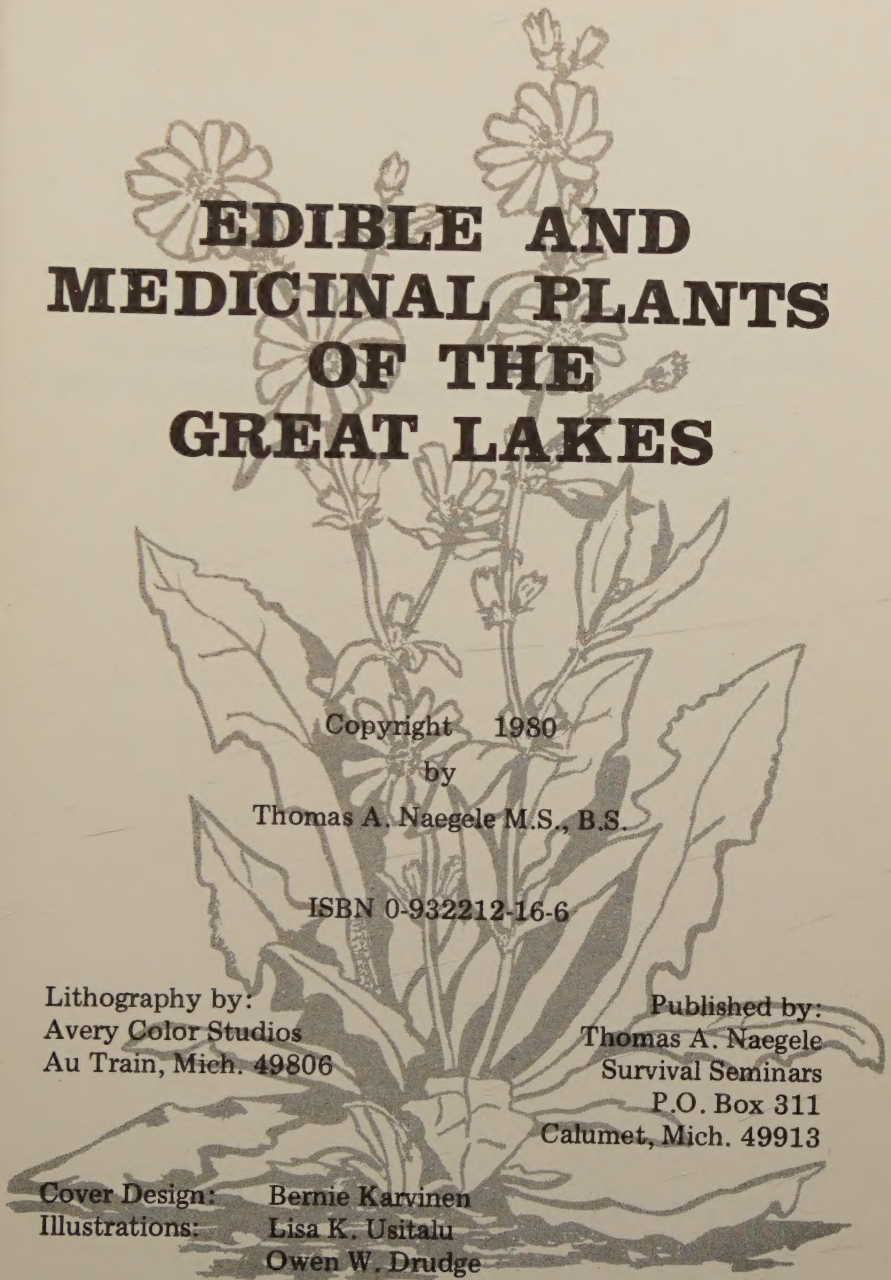

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Acknowledgment:

The creation of this book would not have been possible without *The Creator*... Thankyou.

WARNING

This manual is a compendium of literature and folk uses of edible and medicinal plants. Because much information is either unavailable to this undertaking or totally lacking in certain categories, reasonable caution should be exercised when using the manual.

For example, it is known that the greatest content of the chemical compound *Sanguinarine*, in the bloodroot plant, occurs in spring; thus, that is when bloodroot is collected for commercial purposes. Since it is established that the chemical compounds in plants change seasonally, what do you think the possibilities are that a plant might be harmless in one season and toxic in another?

Seasonal variation is *only one* consideration. There are many more.

Following are procedural guidelines for plant experimentation. Experimental results are invited. Please send them to:

Thomas A. Naegele
c/o Dr. F. H. Erbiach
Biological Sciences
Michigan Technological University
Houghton, Michigan 49931

Name of Plant(s) - Latin Preferred _____

Where Collected _____

Habitat _____

Date Collected _____

Part Used _____

Use _____

How Prepared _____

How Administered _____

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Introduction

Each year more people become interested in utilizing the local flora because of its edible and/or medicinal properties. Because medicinal plant information is not being passed from generation to generation as it once was, it is hoped that this research on the medicinal plants of the Great Lakes Region will enhance local knowledge and inspire new and more thorough investigation in the field of plant identification and evaluation. The information herein has been obtained through personal interviews with residents of the Great Lakes region and through investigation of published material about medicinal plants.

Of all the books written about medicinal plants, four enjoy wide usage among people interested in the utilization of herbs. Written in short story form, Euel Gibbons's *Stalking the Healthful Herb* (19), emphasizes the importance of personal interviews and self-experimentation in discovering and understanding medicinal plants. *Back to Eden* (35), by J. Kloss, likewise emphasizes the personal interview and self-experimentation technique. *A Guide to the Medicinal Plants of the United States* (36), by A. and S. Krochmal, is also a valuable manual, presenting plant information in easy-to-use alphabetical and categorical format. *A Modern Herbal* (22), by M. Grieve, provides a thorough history of medicinal plant uses. This manual incorporates some aspects of these books while including information obtained through personal interview, experimentation, etc.

†††

Scurvy, a vitamin C deficiency causing the inability to lay down bone reticulum, hemorrhagic manifestations, delayed healing, loosening teeth, edema, swollen joints, weakness and eventual death, was a common killer of seamen before the 1800's (40). During the winter layover of the 1534 Cartier expedition, 25 men died from scurvy (77). Survivors drank a tea of northern white cedar leaves, supplied by the Iroquois Indians (78). Within six days, "the distemper relaxed its hold and health and hope began to revisit the hopeless community" (78). Cartier thought this a miracle and introduced the *wonder drug* to Europe by the name *Arborvitae*, the tree of life (78).

†††

There are many everyday ailments which cause discomfort and weakness during our lives. Teething is a very common and painful malady for which little can generally be done. However, a Baraga, Michigan, Ojibwe woman reports that it is common practice among her people to allow teething children to chew gold thread, the root of which alleviates nausea and causes numbness of the gums (47,54,63,70,74,75,76).

†††

We inevitably suffer cuts and scratches throughout life. Witch hazel, an understory tree of Great Lakes forests, has been used as an antiseptic healing agent for cuts, scrapes and scratches. Although modern antiseptic practice was discovered by Joseph Lister in 1865 (40), the Ojibwe of Upper Michigan have been using witch hazel as an antiseptic for centuries (76).

†††

The beer we drink is flavored with the stream bank-growing hop (11). While the primary use of hops has involved its flavoring properties, hops have also been used as an herbal cure for insomnia because they induce a tiring effect (5,22, 32,73).

†††

Typha latifolia (the cattail) has sustained Ojibwe life in the Great Lakes region for generations (73,74,75,76). The edible qualities of cattails' immature flower spikes, young sprouts and roots are nearly common knowledge (15,18,25,34,47). Even though our main encounters may have been at the dinner table, a poultice of the root provided certain relief for a Potawatomi with skin burn (76).

†††

These plants and many more grow throughout the Great Lakes region. With proper precaution, many wild plants can be useful in everyday and survival situations. This manual has been designed for people with a sincere interest in utiliz-

ing plants indigenous to the Great Lakes area.

To properly use this manual, it is important to understand its organization. In most cases it is self-explanatory and provides easy access to information. There are 6 major divisions:

Part 1, the introduction, briefly describes how some plants of the Great Lakes area have been used to cure diseases. This section presents information concerning methods of preparation, vital to experimentation.

Part 2, plant information, comprises the major portion of the manual and contains medicinal plant information. This section is made up of six basic subcategories, making possible the easy location of desired information. Plants have been arranged in alphabetical order by Latin name, scientific family name and by common name.

2a, Plant Description... Verification with at least three descriptive characteristics should be made to insure proper identification of any medicinal plants collected. Although stem and root descriptions are valid all year, the stems and roots of different plants are often silimar. The leaves, flowers and fruits of plants are seasonal, but recognition of the unique qualities of particular species simplifies identification. With experience, one will be able to recognize plants intuitively by general appearance and habitat.

2b, Seasonal Collection... Collection of medicinal and edible plants is periodic, thus seasonal gathering can occur once a reasonable quantity of herb is located, "five times more than needed, to keep the ground well seeded." Under the heading "Season of Availability," one can find the time of year the herb is collected. Once plants are collected, they can be used or stored for later use.

2c, Preparation Techniques... The preparation section assumes that one is familiar with basic techniques of plant utilization. Those techniques are described below and will be referred to by name only throughout the text.

There are two procedures for making herb tea; *infusion* and *decoction.* An infusion is made by placing one ounce of plant material in a container, adding one quart of boiling water and allowing the mixture to steep for 10 minutes. A decoction is prepared by placing the plant parts directly into a container of boiling water and allowing the mixture to boil for 10-20 minutes. As a *Rule of Thumb:* steep leaves, flowers and stems. Boil roots, bark and seeds.

For plant compounds which are insoluble in water, a

tincture or *alcohol extraction* is used. The plant part is immersed in ethanol for a period of time, (usually 48 hours), after which the solution is strained, bottled and stored for use. (Ethanol is difficult to purchase in some areas. Vodka serves as an acceptable substitute.)

A *poultice* is prepared by applying the crushed or ground plant, usually fresh, to the affected area of the body by binding it in place with a piece of cloth. A *wash* is a tea applied externally as a healing or cleansing agent.

Since plant collection is seasonal and utilization is not, it is often necessary to dry and store herbs for later use. Drying plants is an art in itself. For best results, place freshly picked plants on screens with approximately 25 cm of air space, top and bottom. The plants should not be layered more than 3 cm deep. Drying screens should be located in a warm, dry, dark room. An attic usually meets these requirements. Darkness is essential to halt chemical breakdown caused by photolysis. The warm dry atmosphere is necessary to insure rapid dessication of the plant material.

In certain instances, plant material can be ground or powdered for proper utilization. With freshly picked plant material the following steps should be used:

1.) Cut the plant in small pieces with a sharp knife.
2.) Place the pieces in a mortar.
3.) Add water equal to the volume of the plant material.
4.) Grind with a pestel.

Because this method can be very tedious, using a blender is advisable for steps 2,3 and 4.

For dried plant material, the desired consistency can be obtained by crushing with a rolling pin. If a powder is required, one can grind the dried plant with mortar and pestel or electric blender. The preparation section will assume that the reader has familiarized himself with these basic techniques.

Part 3, Literature Review... Each plant discussion will contain a review of literature regarding medical terminology related to that plant's actions, disease symptoms which the plant has been used to relieve, and the toxic properties attributed to the plant. Next, the biological information concerns scientific experimentation involving the species, edibility information and uses by Indians of the Great Lakes area. Chemical compounds known to be found in the plant and dyeing information are contained in this section. Many of these plants have commercial value and are of economic

importance. This information will be found under the commercial heading.

The literature review uses scientific notation to cite references, making it easy for the reader to consult the proper reference and ascertain validity should a disagreement or contradiction arise. If one wishes to concentrate on a single specia or a portion thereof, he is referred to the available literature and may eliminate much preliminary searching. An example of scientific notation follows:

The plant is used as an astringent (12,14), diuretic (45,48, 73), and as a sedative (2,4,10,22,63,65).

The numbers are citation numbers and represent the alphabetical sequence of articles and books in the bibliography which contain information about the plant. Citations 12 and 14 discuss the plant as an astringent, citations 45,48 and 73 discuss the diuretic and astringent properties of the plant, and citations 2, 4, 10, 22, 63 and 65 concern the plant's applicability as a sedative, a diuretic and an astringent. If more thorough information is desired, the reader may consult the bibliography and be referenced to appropriate publications.

3a, Personal Experimentation...

The author has experimented with many of the plants discussed herein. These experiments are described in the "Personal Experimentation" section, as are discussions of personal experiences of Great Lakes persons who use medicinal plants.

Part 4, Bibliography...

The bibliography is an alphabetical listing according to author's last name. There are a great many references available, but those included have been chosen for their outstanding reputations, thorough bibliographies and general availability.

Part 5, Glossary...

In the event that terminology should prove too advanced, the reader may consult the two glossaries located near the

middle of the book. The botanical glossar explains terms used for describing the plants' physical characteristics. The medicinal glossary defines medicinal and scientific terms, diseases and symptoms.

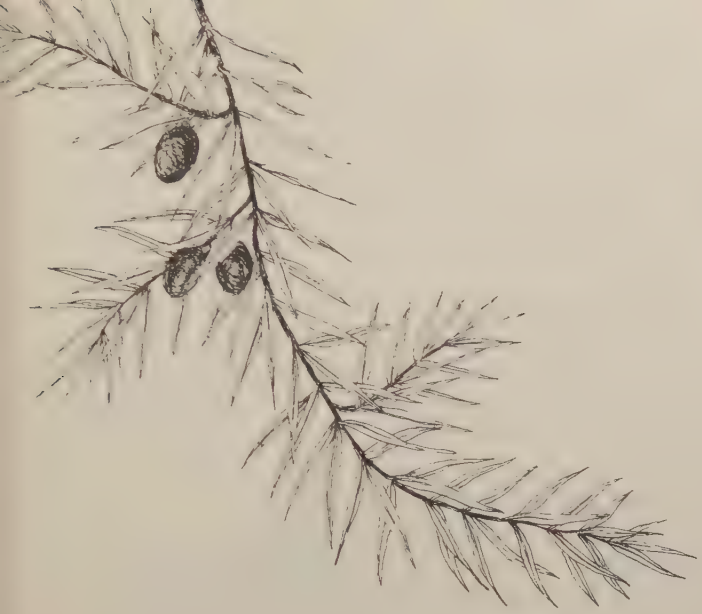
Part 6, Appendix...

In the appendix, the cross reference tables will be a blessing for the avid collector. Here are contained tables listing only the names of plants that are used for many diseases, symptoms and associated terms.. For each category, 4 tables may be present, one for each season when the plant is available for collection. Each table has 3 sub-fields describing the habitat in which the plant normally grows. This will greatly reduce the time spent locating various herbs.

Following the tables is an index of comparative Latin and common names. This was designed to familiarize the reader with the uniqueness of Latin versus common names. This section will also aid the reader in recognizing local plants and provides for simplified information retrieval.

Although more than 100 medicinal and/or edible plants are included in this work, it is by no means exhaustive. Since the author's purpose is to assist the inspired collector, emphasis has been placed upon the historically important plants and herbs commonly available throughout the Great Lakes area.

Despite recent technological advances, the earth is still, in many ways, a mystery. Every year, new experiments with plants are yielding increasing success in finding cures for many diesease (79). The potential is great that a local collector may discover a plant which will make medical history.



PLANT INFORMATION

1. *Abies balsamea*

Family: *Pinaceae*
Common names: Balsam fir, balsam
Stem: Woody, smooth black-gray bark, resin blisters common, up to 25 m, branching, older trees have scaley bark at the base.
Leaves: Alternate, flat needle like, 12 to 25 mm long, whiteish green on bottom, dark green on top, distinct mid vein.
Flower Type: Green, cones, monoecious, spring.
Fruit: Brown winged nutlets in a cone 5 to 10 cm long, broadly rounded with appressed scales, fall.
Roots: Taproot, with spreading lateral roots.
General: Perennial tree, grows in groves.
Habitat: Grows in moist woods and swamps.
Season of Availability: The balsam pitch (resin), roots and needles can be collected in spring, summer, fall and winter.
Preparation: In an infusion, fresh needles are used. The root is used dried or fresh in a decoction. Pitch can be used in ointments or infusions.
Medical Terminology: Balsam fir is thought to be rubefacient (32), stimulant (29) and diuretic in action (10).
Related Disease Symptoms: The resins have been used to relieve back pain (36,63). To relieve rheumatic pains, the resin was placed on joints (5,10,35). The resin was applied externally to skin cuts and sores to heal them (36,63,74,75). The Chippewa Indians placed the resinous gum on a warm stone and inhaled the vapors for convulsions (10). The Ojibwe placed the fresh needles on red hot coals and inhaled the vapors to relieve cold symptoms (75). An infusion made from the leaves was drunk for colds, coughs (36,74,75,76) and asthma by the northern American Indians (40,63). A tea of the leaves was used for consumption (5,40,63). The tea has also been used to cure colic (64). A tea from the resin has been used for urinary affections (5,35).
Poisonous Aspects: The resin is known to have caused contact dermatitis (40).
Biological: For years the Ojibwe have used the resin as canoe pitch (75).
Commercial: The resin's primary modern use is as a mounting medium for microscopic lenses (29). The sap is an oleoresin, commercially known as Canada turpentine (31).
Personal Experimentation: An Ojibwe woman from L'Anse told me she had gathered the resin when her father was hav-

ing great back pain. She heated the pitch in hot water and spread the ointment on his back, relieving the pain (47). It is considered common practice for northern woodsmen to apply the sap on any kind of cuts or scratches.

Abies balsamea.

2. Achillea spp.
Achillea millefolium and A. lanulosa

Family: *Compositae*
Common names: Yarrow, milfoil, yarroway
Stem: Erect, smooth, up to 1 m, usually branchless, aromatic, stiff.
Leaves: Alternate, pinnately compound, finely dissected, featherlike, 10 to 20 cm, green, aromatic.
Flower Type: White, ray flowers, in a flat topped coryomb; coryomb, 5 to 15 cm across, summer, fall.
Fruit: Small brown achene, papallate, summer, fall.
Roots: Taproot
General: Perennial herb, aromatic, grows in clumps.
Habitat: Found growing in abandoned fields and along roadsides.
Season of Availability: The herb is collected when flowering, late summer and fall.
Preparation: The herb is prepared in an infusion. The tea is made by steeping one ounce of the herb in one pint of boiling water.
Medical Terminology: Yarrow is considered a tonic (5, 27) and stimulant (10, 22, 32, 34, 36, 50, 52, 58, 63, 68). The infusion has been used to combat fever (41, 64, 70, 73, 74) because of its diaphoretic action (22, 27, 34, 36, 38, 44, 50, 56, 58, 63, 68). As a wash, it is considered astringent in action (5, 22, 27, 32, 34, 41, 58, 63).
Related Disease Symptoms: In a poultice or wash, the herb has been used to treat skin affections; rash, itch and eczema (10, 36, 50, 52, 70, 74). Women have drunk yarrow tea to relieve menstrual discomfort (5, 32, 38, 50). Northwest coast Indians chewed the leaves and swallowed the juice for colds and sore throat (60). The tea is still commonly used to treat cold (27, 49, 52, 63, 64, 68). The leaves were chewed by the American Indians to relieve toothache (40, 52). To cure colic and stomachache, an infusion was administered (5, 32, 36, 41). The tea has also been used for catarrhal affections (32, 36, 50, 51). The Chippewas sprinkled the tea on hot stones and inhaled the fumes to treat headache (10). The northwest coast Indians soaked and pounded the leaves, applying the them to the head in a poultice to cure headache (60).
Poisonous Aspects: Rare cases of poisoning have been reported (33).
Biological: In antibiotic experiments, *Achillea millifolium* inhibited gram + bacteria (57).

Chemistry: Yarrow contains the alkaloid achilleine (33,58). The flowers contain myristic, carotic, linoleic and oleic acids and ceryl and sterol alcohol and the hydrocarbon triacontane (43).

Commercial: The herb can be collected for sale to drug companies (37).

Personal Experimentation: I have drunk over a quart of this tea at one sitting and have drunk it periodically through the years. I have noticed only a slight diaphoretic effect. Yarrow tea is commonly ingested for treatment of winter colds in Michigan's Upper Peninsula.

Achillea spp.

Acorus calamus.

3. *Acorus calamus*

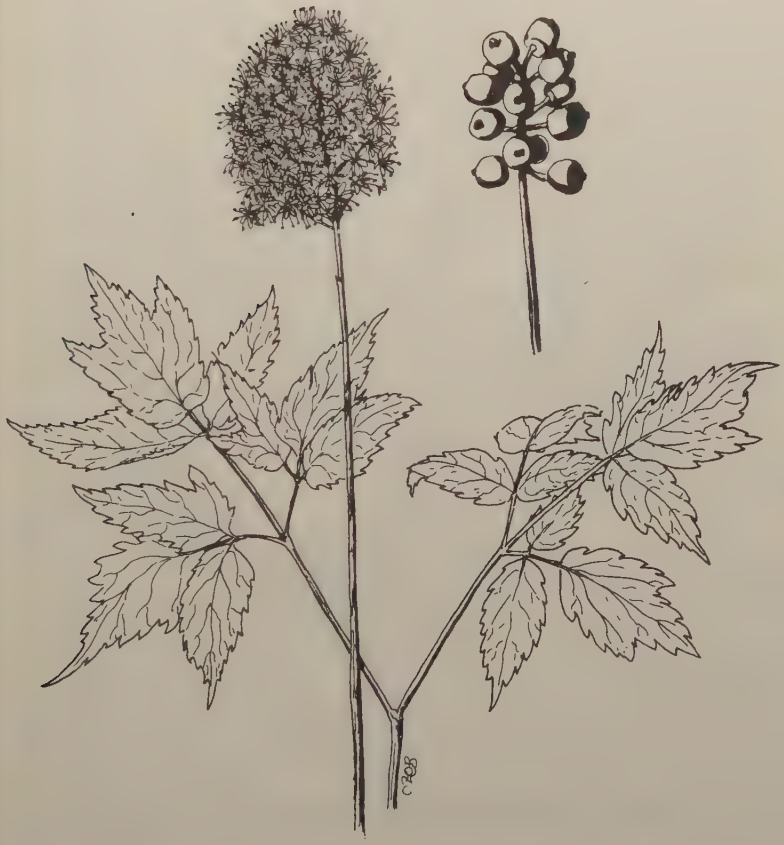
Family: *Araceae*
Common names: Sweet flag, calamus
Stem: Green, erect, smooth, 3 angled, up to 1 m, stiff.
Leaves: Alternate, mostly basal, long linear, sharp edges, thickened in the middle, up to 1 m. 6 to 20 mm wide, green.
Flower Type: Yellowish green, in a spadix, cylindric-cone, 7 to 12 cm long, 1 to 2 cm wide, 6 sepals, 6 stamens, solitary ovary, spring, summer.
Fruit: Berry, dry on the outside, gelatinous on the inside, brown, fall.
Roots: Thick, aromatic rhizome with fiberous roots, creeping.
General: Perennial herb, growing in clumps, usually spreading by rhizomes.
Habitat: Acorus grows in marsh and shallow water.
Season of Availability: The rhizomes are collected in spring and fall.
Preparation: A cough medicine was made from the combined roots of *Acorus calamus* and *Aralia nudicaulis* (40).
Medical Terminology: Therapeutically, Acorus is considered a tonic (35, 38, 40) and an aromatic stimulant (5, 10, 22, 36, 51, 63, 68). It is also considered a carminative (22, 35, 36, 50, 51, 68) and an aromatic bitter (27, 40, 58, 63). Some American Indians considered the rhizome to be a panacea (18). The rhizome has been considered official in pharmaceutical preparations using 3 grams as an average human dose (2).
Related Disease Symptoms: Indians made a root decoction which was drunk to cure pain in the bowels (23,24,74). The dried root was chewed to relieve dyspepsia (5,18,22,27,35, 36,50,55,68). For flatulence and colic, the root tea was taken internally (5,22,27,35,36,38,40,55,63,68,73,74). To treat colds, the Chippewas drank the root tea or sniffed the dried pulverized root (10). The tea has been used to stop coughs (36, 50) and treat catarrhal affections (40). The Chippewas chewed the roots to relieve toothache. (10).
Biological: The immature leaves are edible (18,25). In antibiotic studies, Acorus calamus inhibited gram + bacteria (57).
Chemistry: The plant contains a volatile oil and the bitter principle, acorin (58).
Commercial: The root is used as a flavoring agent in candy (15,18).

4. Actaea spp.
Actaea alba, A. rubra, and A. arguta

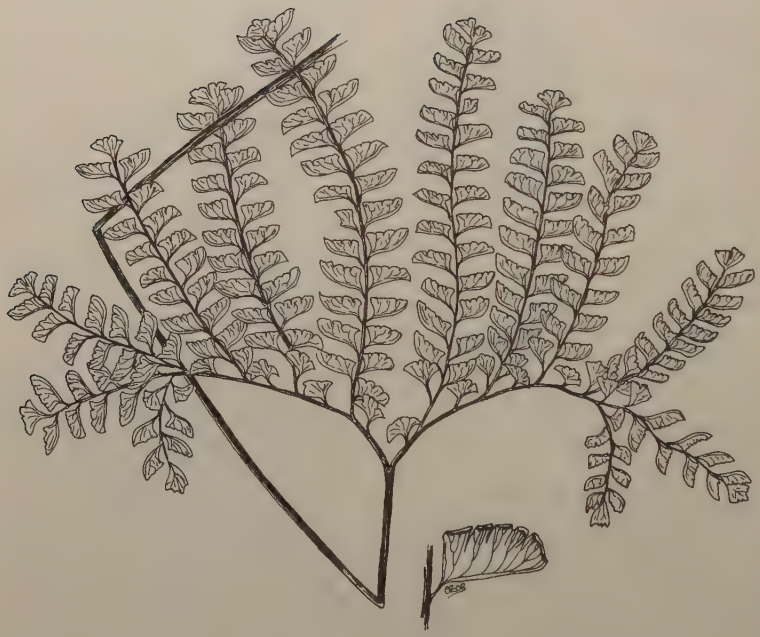
Family: *Ranunculaceae*
Common names: Doll's eyes, baneberry
Stem: Smooth, green, branchless, up to 1 m, erect.
Leaves: Alternate, 2 to 3 times pinnately compound; leaflets, whitish beneath, ovate, sharply cleft and toothed, smooth, green.
Flower Type: White, 4 to 10 petals, 4 to 5 depals that are soon falling, 1 pistal, 3 to 7 mm across, born in a terminal cylindric raceme on thick red pedicels, 5 to 20 cm long, spring.
Fruit: **Shiny red or white berries, subglobose, 1 cm long, dis-**

Fruit: Shiny red or white berries, subglobose, 1 cm long, distinct 'eye spot' which is the persistant stigma, summer.
Roots: Creeping lateral roots.
General: Perennial herb, rarely grows in large clumps.
Habitat: *Actaea spp.* grows in rich woods, sugar maple forests, throughout the area.
Season of Availability: The roots are collected in spring, summer, fall and winter. Seeds are collected in the fall.
Preparation: The roots are used fresh or dried, ground or whole in a decoction or mixed with grease in an ointment. Seeds are used in the same manner.
Medical Terminology: The root is considered emetic (33) and purgative (10,51).
Related Disease Symptoms: For stomach trouble, the Penobscots drank a root decoction (63). The Cheyennes made an infusion from the roots and stems, which was administered to women to make the first milk pass off quickly. Better results were claimed if *Mertensia ciliata* was boiled with it (24,70). The Chippewa women drank a root tea for excessive menstrual flow (10). Mixed with grease, the ground root has been rubbed on the body to treat rheumatism (38).
Poisonous Aspects: The plant is considered poisonous (33, 40,46). Kingsbury reports that no loss of life has been recorded in the U.S. (33). Muenscher claims there are documented cases of death in children from eating the berries (46). There are reports that eating six berries is sufficient to produce increased pulse, dizziness, burning in the stomach and colic (40,46).

Personal Experimentation: I have eaten 4 berries of both the red and white baneberry and felt no effects whatsoever. The berries are extremely bitter and I doubt whether anyone would want to eat more than one.



Actaea spp.



Adiantum spp.

5. Adiantum spp.
Adiantum capillus-veneris and A. pedatum

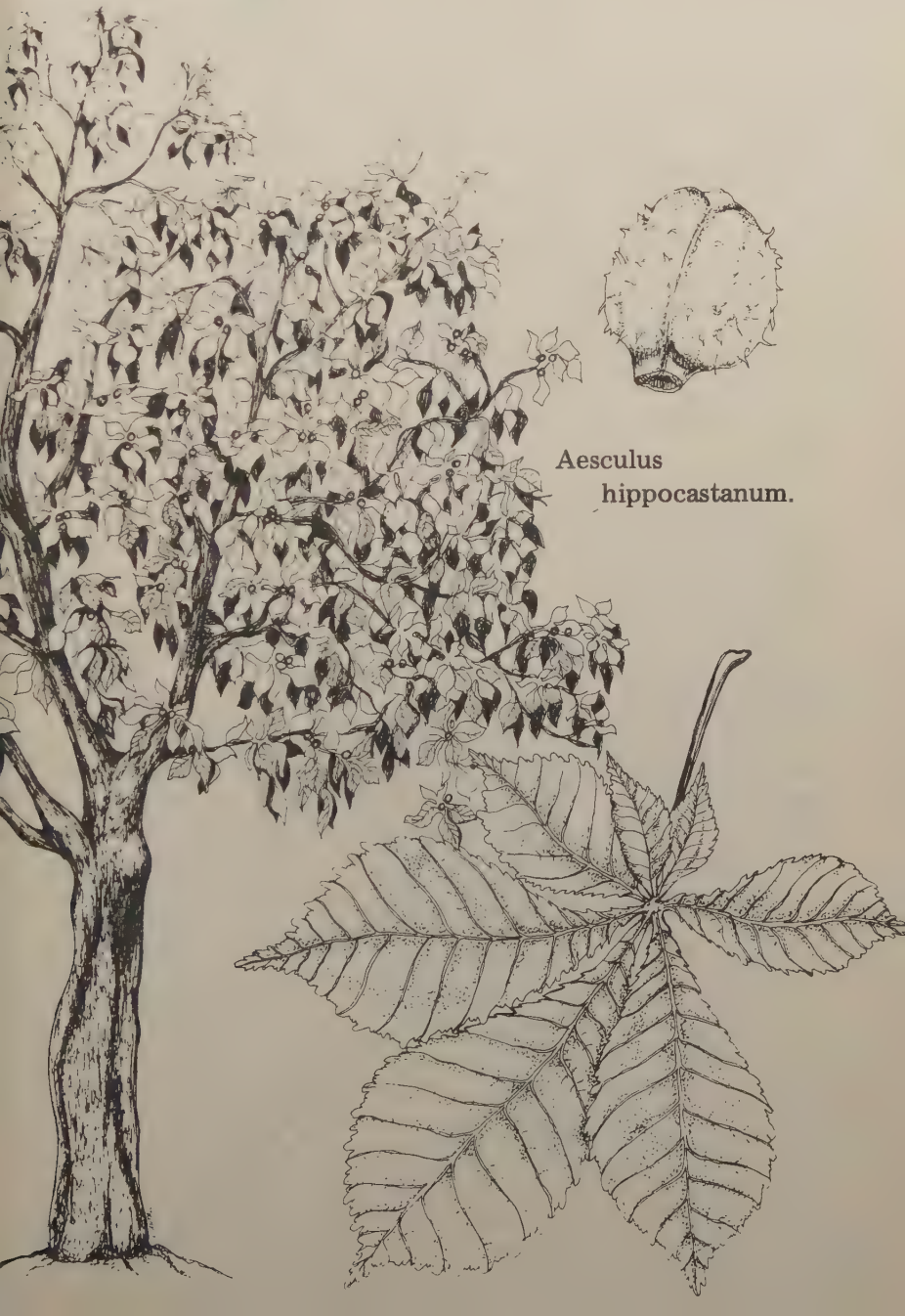
Family: *Polypodiaceae*
Common names: Maiden hair fern
Stem: An erect stipe, dark black, lustrous, up to 6 dm, forking, not a real stem.
Leaves: Whorled, pinnately compound, up to 5 dm; numerous pinnules, short stalked, triangular-oblong, entire, green membranaceous.
Flower Type: Gray-brown indusia, on the margin, linear, 2 to 6 mm long, 1 mm wide, summer.
Fruit: Black microscopic spores.
Roots: Slender black rhizome.
General: Perennial, grows in great groups, usually in hundreds.
Habitat: It grows in rich woods and is commonly found in sugar maple forests.
Season of Availability: The leaves are collected during summer while the rhizomes are collected in spring, summer and fall.
Preparation: The leaves are usually used fresh in a poultice. The roots (rhizomes) are used fresh or dried in a decoction.
Medical Terminology: The tea is used for coughs (22,36,74), because of its expectorant properties (27,38,44,56,68). For catarrhal affections (36,38,44), it is used as a pectoral (22,32, 51,58,68). To relieve hoarseness(36, 38, 44),the tea is taken for its demulcent action (22,32,56,58).
Related Disease Symptoms: The Chippewa and Menominee Indians used the entire plant in a tea to relieve menstrual discomfort (63,70,73,74). Others state its use in alleviating menstrual pains (22,36,38). In Hawaii, the leaves were used to heal skin sores (48). A poultice of the leaves has been used to relieve pain from rheumatism (27,36,69).
Biological: The fronds are commonly made into a syrup (32, 56).
Commercial: The plant can be gathered and sold to some drug companies (37).

6. *Aesculus hippocastanum*

Family: *Hippocastanaceae*
Common names: Horse chesnut, buckeye
Stem: Woody, erect tree, corrugated, dark gray bark, branching, up to 25 m.
Leaves: Opposite, palmately compound; 7 wedge-ovate 10 to 25 cm irregularly serrate leaflets, green, large resinous buds.
Flower Type: White, 4 to 5 petals, tubular calyx, terminal racemes with long stout pedicels, cone shaped.
Fruit: Spiney green leathery capsule, round, 4 to 6 cm in diameter, contains 2 to 3 shiny brown nuts with reddish brown stripes, late summer, fall.
Roots: Taproot.
General: Perennial deciduous tree, mostly an ornamental in the great lakes area.
Habitat: The tree can grow in forest conditions, but is found only where planted in the Upper Peninsula, generally in yards and cities.
Season of Availability: The flowers are collected in spring; nuts during the fall. The bark is collected throughout the year.
Preparation: The nuts and bark are prepared in a tincture or decoction.
Medical Terminology: Horse chesnut is considered tonic (36, 38) and astringent in action (32,51,58). It has been reported that the seeds contain a narcotic principle (32,51,58).
Related Disease Symptoms: The tincture of the seeds has been used to treat hemorrhoids (22,36,38,51). The seeds have been used in treating neuralgia (36,51). A decoction of the fruit or bark has been used to treat fever (32, 36). A wash, made from the infusion of the bark or nuts, was used to cure skin sores (36).
Poisonous Aspects: The seeds are considered poisonous (33, 40,46,58). An overdose of the seed causes inflamation of the mucous membranes, vomiting, depression, stupor, loss of coordination, weakness and paralysis (46). Cases of death have been recorded from overdoses of the seeds (33).
Biological: In the Southern States, the pulped seeds were put in ponds and streams to stupefy fish (32).
Chemistry: The plant contains the glucosides *Aesculin* (32) and *fraxin* and *tannin* (58). The plant is said to contain the

lactone glucoside *esculin* (51) and the vasopressor agent, *quercitrin* (40).

Commercial: Drug companies sometimes purchase *Aesculus hippocastanum* (37).

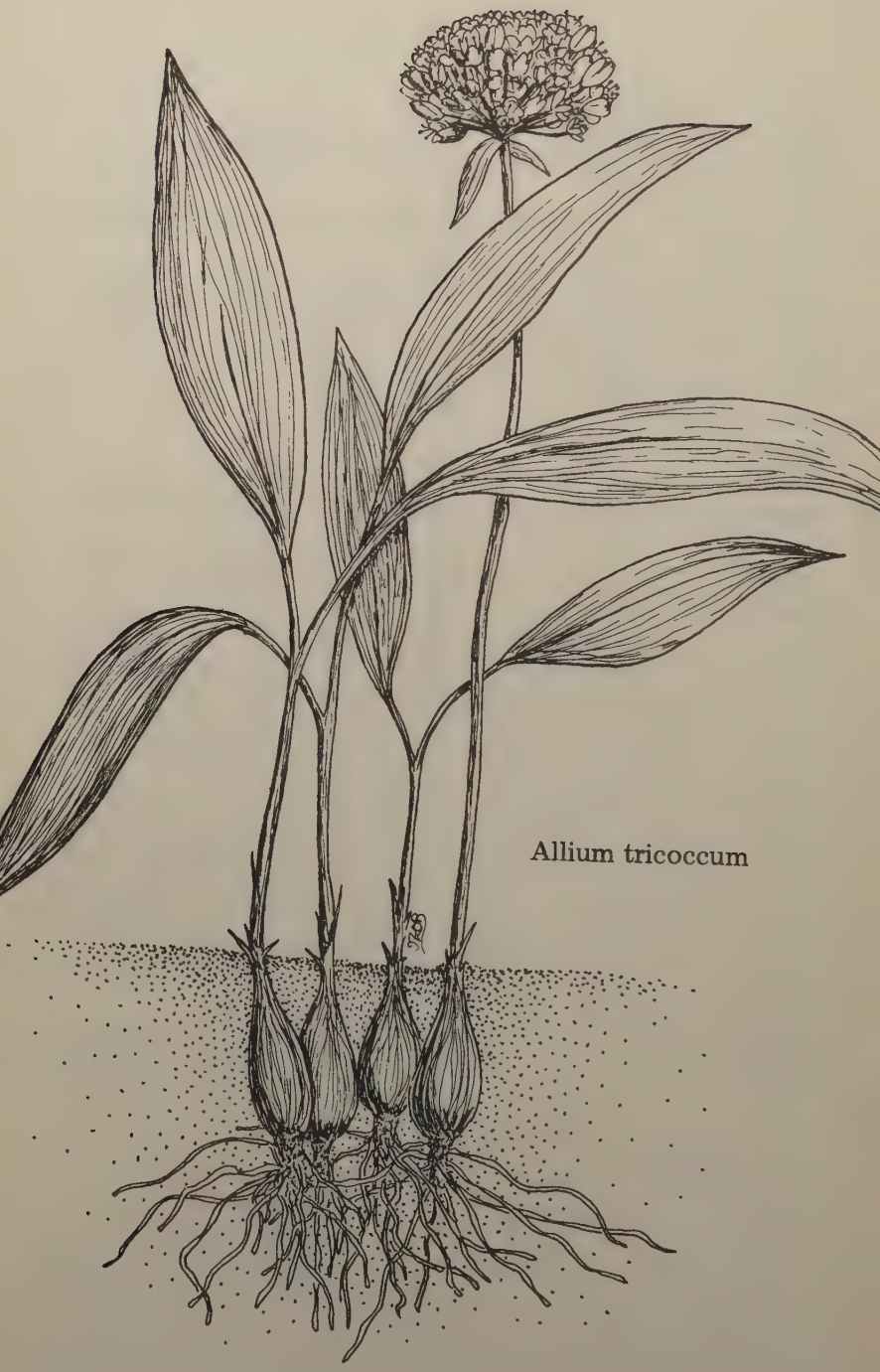


Aesculus hippocastanum.

Aletris farinosa.

7. *Aletris farinosa*

Family: *Liliaceae*
Common names: Colic root, star grass, unicorn plant
Stem: Smooth, green, unbranching, practically leafless, 3 to 10 dm tall, erect.
Leaves: Rosette, linear to lanceolate, parallel veined, green, up to 20 cm.
Flower Type: White, 5 to 8 mm long, in a long (8 to 25 cm) spiral spike, sepals and petals united into a lobed tube, bracts, 6 stamens, spring, summer.
Fruit: Brown, beaked, ovoid capsule, summer, fall.
Roots: Fiberous
General: Perennial herb
Habitat: Found on sandy soil in open woods
Season of Availability: Rhizomes and roots are collected in the fall.
Preparation: A decoction is prepared from the fresh or dried roots or rhizomes.
Medical Terminology: Therapeutically, *Alteris farinosa* is considered tonic (9,22,32,44,68), diuretic (51,58) and sedative in action (36,38,63). Johnson believes that *Alteris farinosa* has no medicinal properties other than that of a simple bitter (32). The dried rhizome and roots have been considered official and given in 2 gram doses (2).
Related Disease Symptoms: The most common use of the root decoction has been to relieve colic (9,22,36,38,40, 44,63,68). The Catawabas used the leaves to make a tea to stop diarrhea (40). The root, mixed with brandy, was drunk to relieve pain from rheumatism (36,38). A poultice of the leaves has been used to treat sore breasts (36,63). The root has been used in the treatment of uterine diseases (51).
Commercial: The root is still purchased by drug companies (37).


Allium tricoccum

8. *Allium tricoccum*

Family: *Liliaceae*
Common names: Wild onion, leek, wild garlic
Stem: Nearly stemless except for the flowering stem which is smooth, green, up to 3 dm tall.
Leaves: Basal, usually only 2 leaves, 20 to 30 cm, lance-elliptic, shiny, thick, when bruised they smell like onions, parallel veined.
Flower Type: White, 3 petals, 3 sepals, born on thick pedicels in a terminal umbel, early summer, appearing after leaves have died.
Fruit: Tiny, shiny black capsules, summer.
Roots: White bulb with fiberous rootlets
General: Perennial herb, grows in clumps, common.
Habitat: The leek grows in rich maple and/or beech forests.
Season of Availability: Collected in spring.
Preparation: The bulb is used fresh, as a poultice.
Medical Terminology: The bulb has been used as a emetic (10,63). The Chippewas combined the bulb of *Allium tricoccum* with *Caulophyllum thalictroides* root, made a tea and used it as an emetic (10).
Related Disease Symptoms: The bruised wild onion or leek, applied to the skin as a poultice, was said to relieve the pain from bee and wasp stings (63). Indians applied the bulbs and stems as a poultice to carbuncles (24,40). A tea from the bulbs has been used as a wash for open sores (40).
Poisonous Aspects: Kingsbury cites cases of toxicity by onions and wild onions, but no recorded cases against *A. tricoccum* (33).
Biological: In antibiotic experiments, 6 *Allium* species have inhibited gram + and – bacteria (57). The bulbs are edible (9,15,18,47,79). The Menomini, Ojibwe and Potawatomi used the bulbs in stews and soups (74,75,76).
Personal Experimentation: I have eaten the bulbs for years, fresh in salads or on sandwiches, cooked in soups or fried. I have never experienced any harmful effects from wild leeks.

Alnus rugosa.

9. Alnus rugosa

Family: *Betulaceae*
Common names: Tag alder, swamp alder, speckled alder
Stem: Brown to blackish-gray bark, woody, brittle, branching, up to 5 m.
Leaves: Alternate, oval to ovate, doubly serrate, acute, green, rounded to subcordate at base, 5 to 8 cm long.
Flower Type: Monoecious; staminate, catkins, 2 to 4 cm long; pistillate, small (1 to 2 cm) cone-like catkins, green, drying to brown, spring.
Fruit: Small winged nutlets, 5 to 10 mm across.
Roots: Lateral roots
General: Perennial decidious bushy shrub, prominently lenticilate, always in groups.
Habitat: Common to wet areas, stream banks.
Season of Availability: The bark is collected in the spring, summer, fall and winter.
Preparation: It is prepared in a decoction with either fresh or dried materials.
Medical Terminology: Tag alder has been used as an astringent (10) and alterative (22,27,32,58,63,68).
Related Disease Symptoms: The Indians placed the chewed bark on skin wounds and cuts for a healing poultice (36,38, 63). A wash made from the inner bark decoction has been used to heal skin diseases (22,27,68). This same wash has been used to treat poison ivy rash (36). To stop cramps, Indians drank a tea made from the boiled bark (10,63). The Indians also used the bark tea as a douche and topically, to cure piles (63). A poultice from the bark has been used to reduce swelling and inflamation (10,63). The tea has been used to treat syphilis sores (22,36,68). The bark decoction was taken internally to stop diarrhea (22,36,68). The dried, powdered bark, steeped in water, has been applied to eye infections (36,38).
Chemistry: The bark has been used for a brown dye (38). The bark contains tannin (58).

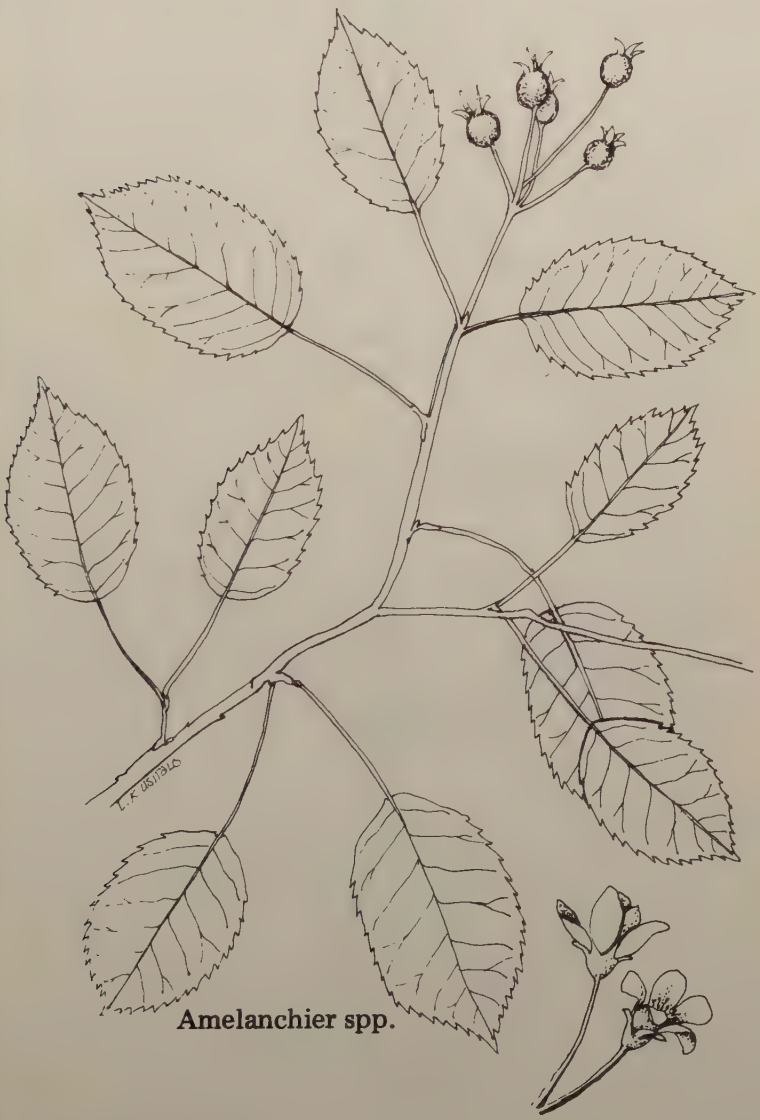
10. Amelanchier spp.

Family: *Rosaceae*
Common names: Serviceberry, sugarplum, juneberry, shadbush.
Stem: Woody, up to 4 dm in diameter, smooth striped bark, gray with reddish gray strips, up to 20 m tall.
Leaves: Ovate to slightly obovate, acuminate, rounded at base, 4-10 cm long, 2.2 to 5 cm broad, green, alternate, petiolate, doubly serrate, 11 to 17 pairs of primary veins.
Flower Type: White petals, 10 to 14 mm long, in racemes, spring.
Fruit: Purple to black, glaucous, juicy, sweet, up to 2.5 cm in diameter, edible, early summer.
Roots: Lateral, stout, woody root.
General: Small tree, shrubby, perennial, deciduous., pioneer species.
Habitat: Old fields, burned over or disturbed areas.
Season of Availability: The dark red berries can be collected in the early summer.
Preparation: The berries can be eaten fresh, made into jams, jellies and/or pies. Because of the numerous seeds, some find it essential to put the jam through a sieve or colander. The berries can be stamped and dried for future use.
Related Disease Symptoms: The Chippewa made a decoction of *Amelanchier spp.* root along with the roots of cherry and young oak, which they drank to treat dystenery (10). The bark of *Amelanchier spp*, *Prunus virginiana*, *Prunus pennsylavanica*, *and Prunus serotina* was prepared in a decoction by the Chippewa and ingested for female weakness (10). From the leaves of sugarplum, the Cheyenne made a tea (24).
Poisonous Aspects: Wilting leaves of many plants in the *Rosaceae* family contain the deadly poison, cyanide, thus *Amelanchier spp.* may be another (33).
Biological: The fruits are edible, fresh, dried, and cooked (10,15,18,25,47). Indians across the U.S. and Canada considered the fruit an important food source (10,15,18,25,78).
Commercial: Presently, there is no commercial processing of sugarplums.
Personal Experimentation: For years, I have collected sugar plums by the long and tedious hand-to-bucket method. In 1978, I developed a method to make fruit collection fast and

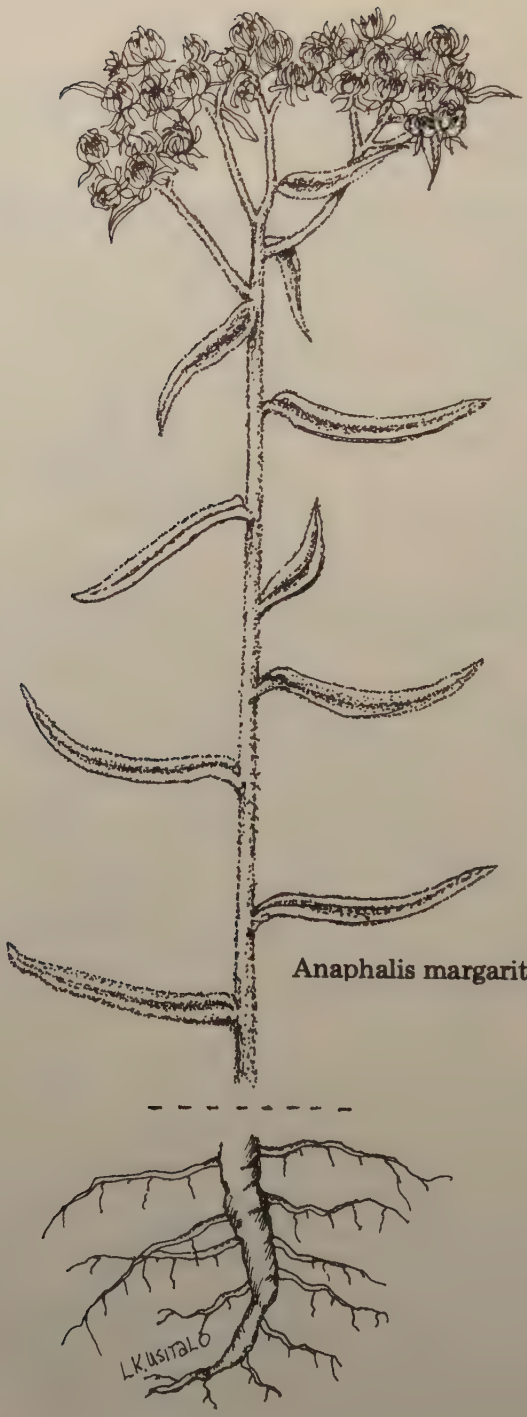
easy:

1) Put a large tarp on the ground by the tree.
2) Bend the elastic branches down to the tarp.
3) Shake the branches vigorously.

Using this simple method, it is easy to collect a gallon of berries in 10 to 15 minutes. The berries are good fresh, in jams and in pies.



Amelanchier spp.



Anaphalis margaritacea.

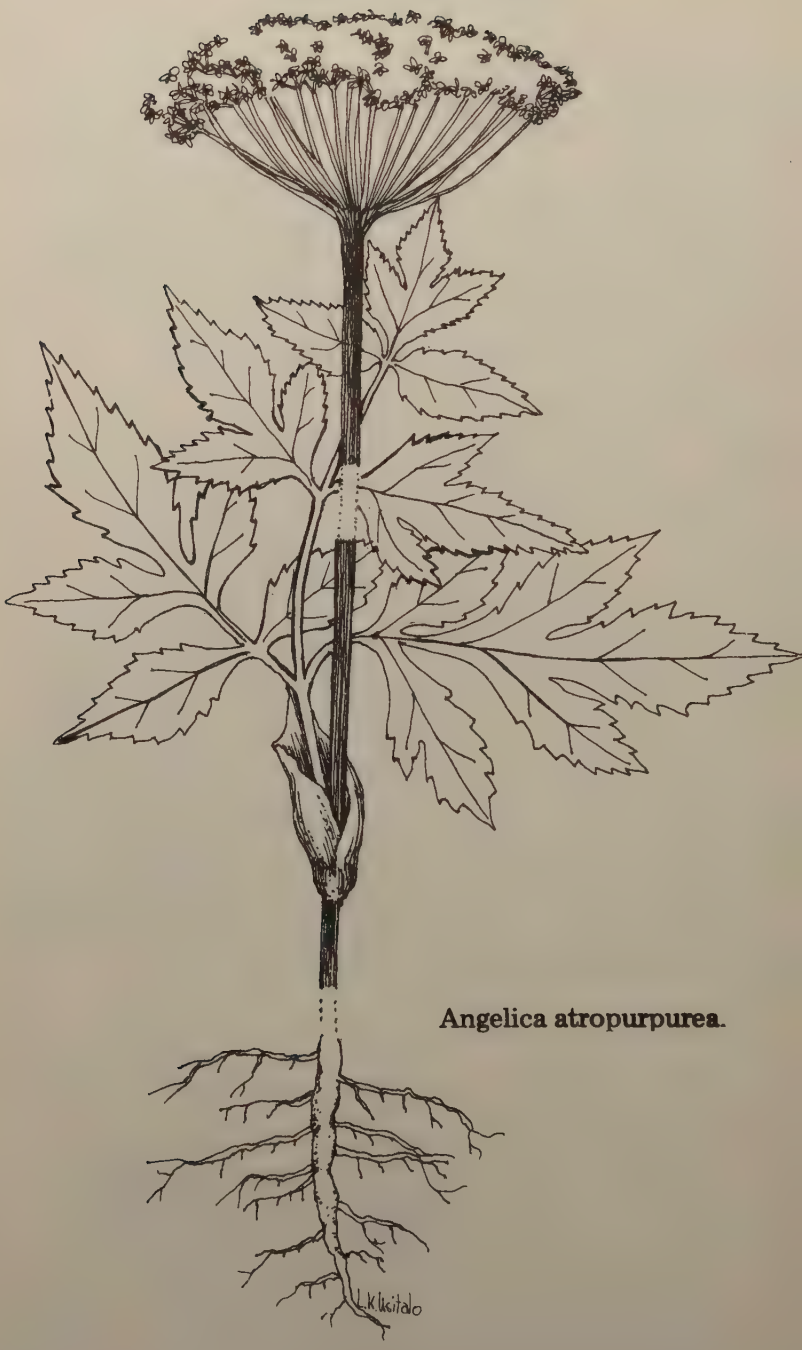
11. Anaphalis margaritacea

Family: *Compositae*
Common names: Pearly everlasting
Stem: White, wooly, erect, branching only at the top, up to 1 m.
Leaves: Alternate, white wooly green, sessile, linear-lanceolate, 4 to 8 cm.
Flower Type: White with yellow centers, in a compound corymb, 1 cm wide; corymb 10 to 15 cm across, thread-like tubular corolla, pappalate, persistent, summer and fall.
Fruit: Tiny light brown achene, fall.
Roots: Taproot
General: Perennial herb, usually spreading by its rhizome, common, sometimes confused with *Achillea millifolium.*
Habitat: *Anaphalis* grows in groups in open fields and meadows.
Season of Availability: The flowers are gathered in late summer.
Preparation: Flowers are dried and used in an infusion or powdered. The Cheyenne Indians collected and powdered the flowers (23,24).
Medical Terminology: The herb decoction was applied to hemorrhoids because of its astringent action (40).
Related Disease Symptoms: The flower powder was chewed and rubbed on the body before war to prevent injury and to increase swiftness (23,24). The chewed powder was also put on the hoofs of warriors' horses to increase speed (23,24). To aid a patient stricken by paralysis, the Flambeaus spread the pulverized flowers of pearly everlasting over live coals and let the smoke floww over the affected areas (63,75). Chippewas made a tea of pearly everlasting flowers mixed with wild mint, sprinkling the tea on hot stones to steam paralysized areas (10).
Personal Experimentation: I have often noticed the dried flowers in floral arrangements, probably because they are easy to dry and maintain a lifelike appearance.

Anemone canadensis.

12. Anemone canadensis

Family: *Ranunculaceae*
Common names: Canada anemone
Stem: 1 to 2 branching stems from rootstock, up to 7 dm, green, villous.
Leaves: Alternate, basal leaves, petiolate, stem leaves sessile; 5 to 7 sharply toothed lobes, divisions acuminate, green.
Flower Type: White, 5 petal-like sepals, numerous stamens, numerous petals, 2 to 5 cm across, solitary on a long peduncle, spring and summer.
Fruit: Flat, brown, winged achene, beaked, summer.
Roots: Fiberous
General: Perennial herb, grows in clumps.
Habitat: The plant is easily found during the spring in open woods and in wet areas, along stream banks.
Season of Availability: The herb and root are collected in the spring.
Preparation: The herb is used in an infusion, fresh or dried. The root is used in a decoction either fresh or dried.
Related Disease Symptoms: *Anemone* has been used as a poultice for boils by the Menominees (63). The Pillager Ojibwe used the herb for a throat lozenge to clear the throat, so they could sing better (63,75). The roots, made into a tea, were used as a wash for eye ailments (63, 73). The root tea was used by local Indians to wash the eyes when they twitched (73). Rootstocks were used, crushed, on wounds and hemorrhages and in infusions for treating infections (54).
Poisonous Aspects: Kingsbury says that *Anemone spp.* are on the official poisonous plant list and have been to blame for some reported livestock poisoning (33).



Angelica atropurpurea.

13. Angelica atropurpurea

Family: *Umbelliferae*
Common names: Angelica, purplestem angelica, masterwort
Stem: Purple, ribbed, hollow, stout, up to 2 m, branching.
Leaves: Alternate, 2 to 3 ternately divided compound, 5 to 7 pinnate segments, each oblong-lanceolate to ovate, serrate, smooth, leaflets up to 15 cm long, basal leaves up to 6 dm long, green.
Flower Type: White and greenish petals, in subspherical double umbels, umbel diameter up to 30 cm, summer, early fall.
Fruit: Small (5 to 8 mm) brown, ridged, carpel.
Roots: Taproot, aromatic.
General: Perennail herb
Habitat: Found in woodland swamps and near forest streams
Season of Availability: The root is collected in fall. Seeds are collected in late summer.
Preparation: Roots are used fresh or dried in a decoction.
Medical Terminology: *Angelica* is considered an aromatic, stimulant, diaphoretic, and in large doses an emetic (27,32, 38,41,58,63,66).
Related Disease Symptoms: Chewing the root has been thought to relieve stomach gas (33,36,38,63) and colic (27, 41,52). The Creek Indians used the root for stomach ache, colic, hysterics, worms and pains in the back (63). The Menominees used *angelica* root to reduce swelling and pain by pounding the cooked roots and making a poultice with the pulp and adding *Artemesia canadensis* leaves (63,74). It has been used to treat bronchitis, rheumatism, gout and fever (27,32,35,36,54). To promote menstrual flow, the root tea has been used (32,36).
Biological: The dried ground root has been mixed with tobacco for smoking (40).
Chemistry: The root contains a volatile oil and the acrid resin *angelicin* (32,58).
Commercial: The root is still purchased by drug companies (37). The roots are used in making condiments (15,38,66).

Aplectrum hymale.

14. Aplectrum hymale

Family: *Orchidaceae*
Common names: Putty-root, adam-and-eve root
Stem: Smooth, usually leafless, green, 20 to 40 cm tall.
Leaves: One elliptic, parallel veined leaf, green, entire, acute, attached to the base of the stem, appears in autumn after flowering.
Flower Type: White lipped, orchid type, marked with purple, 10 to 12 cm across, drooping, 7 to 15 flowers in a spirally terminal spike, spring.
Fruit: Plump reflexed capsules, summer.
Roots: 2 horizontal, subglobose, glutinous corms, connected by stolons.
General: Perennial herb, protected, rare.
Habitat: *Aplectrum* can be found in rich woods with lowlands and in peat bogs.
Season of Availability: The corms are collected in the fall.
Preparation: The corms are used, fresh or dried, in a decoction.
Medical Terminology: Putty-root contains a mucilage and is considered a demulcent pectoral (58).
Related Disease Symptoms: The corms have been used in treating bronchial illness (36,38).
Biological: At one time, the ground corms were mixed with water and used as a paste for pottery (54).
Commercial: The root is periodically purchased by drug companies (37).

15. Apocynum spp.
Apocynum androsaemifolium and A. cannabinum

Family: *Apocynaceae*
Common names: Indian hemp, dogbane, milkweed, colicroot
Stem: Reddish brown, stiff, slender, fiberous, milky sap, underbranched below, up to 1.2 m, spreading branches above
Leaves: Opposite, petioled, ovate to oblong, entire, acute, smooth, dark green, 2 to 4 cm long.
Flower Type: White to pink, bell shaped, 6 to 9 mm long, 5 lobes, in terminal nodding cymes, summer.
Fruit: Long red slender pods, 7 to 20 cm long, 3 to 10 mm wide, summer, fall.
Roots: Taproot
General: Perennial herb, grows in clumps, common.
Habitat: Fields throughout the Great Lakes region. *A. cannabinum*, which looks very similar, is found in shaded fields, along forest-field interfaces.
Season of Availability: The roots and rhizomes of both plants are collected in fall.
Preparation: The roots are usually dried and made into a decoction or tincture.
Medical Terminology: *Apocynum* is considered diaphoretic (40), cathartic (10,32,36,44,58,63) and expectorant in action (22,38,51,68). It is also considered to have the properties of a diuretic (10,22,32,51,57,58,63,73,76) and tonic (1,38,40, 68). If large doses are ingested, it acts as an emetic (10,32,36, 38,40,44,51,58,63,68). The dried rhizome is considered official with the average dose of 60 milligrams (2).
Related Disease Symptoms: The root tea has been used primarily to treat dropsy (1,22,32,38,40,51,63,68,73). The root decoction is considered a heart tonic or heart stimulant (22,36,37,51,58,68). The Potawatomis drank a decoction of the green fruit as a heart and kidney medicine (36,40,63,76). The drug from the root possesses a more powerful action on the heart than digitalis, but is more irritable to the alimentary tract (1). For headache, the Ojibwas inhaled the smoke of the root (36,63,75). The Chippewas sniffed the dry powdered root to cure headaches and to treat colds (10). To cure earaches, the Chippewas poured the cooled root tea into the ear(10). The root has been used to treat rheumatism (22,63). The Penobscots drank the root tea to expel worms (63). Made into a liniment, the roots have been used as a stimulant to sensory nerves (56).

Poisonous Aspects: Kingsbury cites many articles on labratory experimentation and separation with the compounds found in both *A. androsaemifolium and A. cannabinum* (33). Only rare cases of death have been attributed to this plant --- probably because of its poor taste (33). The sap has caused contact dermatitis (40).

Biological: The fibers in the stem have been utilized for weaving, making cloth, thread and rope (29,55,63,73,74,76). In antibiotic experiments, *Apocynum cannabinum* inhibited gram - bacteria (57).

Chemistry: The root contains the glucoside *apocynein* and the toxic resin *apocynin* (51,58). The root also contains the cardioactive glucoside *cymarin* (58) and *apocannoside* (40). There is also a lactone called *cynotoxin* (1). The sap has a rubber-containing latex (55).

Commercial: The root is still purchased by drug companies (37).

Apocynum spp

Aquilegia canadensis.

16. Aquilegia canadensis

Family: *Ranunculaceae*
Common names: Columbine, rockbells, meetinghouses
Stem: Green, smooth, up to 1 m tall.
Leaves: Alternate, 2 to 3 times compound, in divisions of 3's, basal leaves long petioled, 10 to 20 cm broad; leaflets, 2 to 5 cm broad, sessile, entire to a lobed or toothed apex.
Flower Type: 5 red to pink spurred petals, 5 petal-like sepals, many long projected yellow stamens, nodding, spring, early summer.
Fruit: Many small black shiny seeds in a brown erect capsule, summer.
Roots: Fiberous
General: Perennial herb
Habitat: Open forests and along forest streams.
Season of Availability: The seeds and herb are collected in the summer.
Preparation: The seeds are ground and used in an infusion. The herb is used fresh or dried in an infusion.
Medical Terminology: The entire plant was thought to have diuretic and diaphoretic properties, but it is rarely used (44).
Related Disease Symptoms: The powdered seeds were put in boiling water and the tea was taken internally for fever and headache (70). For throat and mouth irritations, the herb tea was used as a gargle (27). A root tea was used to stop diarrhea (52). The seeds were used to speed up childbirth (52).
Poisonous Aspects: The seeds of *Aquilegia vulgaris* have proven fatal to children, therefore the seeds of this species may also be poisonous (40).
Biological: Not much experimentation has been done on the plant.

17. Aralia spp.
Aralia nudicaulis, A. hispida, and A. racemosa.

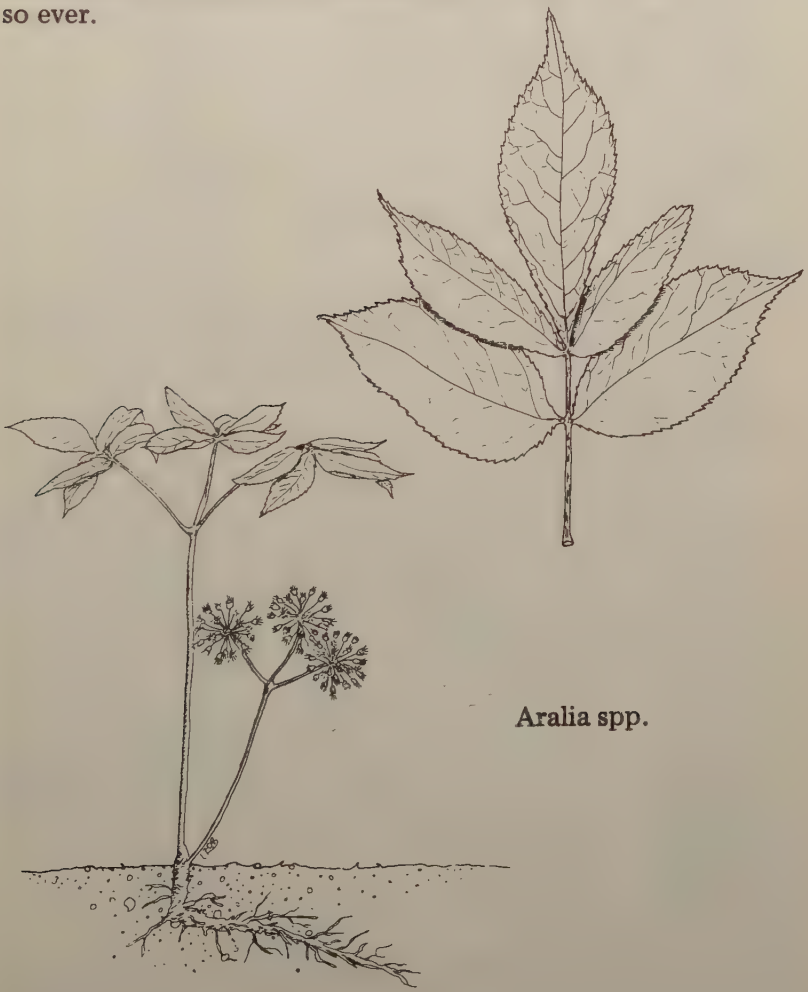
Family: *Araliaceae*
Common names: Wild sarsparilla, spignet *(A. nudicaulis)*, bristly sarsparilla *(A. hispida)*, spiknard, Indian root, sarsparilla *(A. racemosa)*.
Stem: *(A. nudicaulis)* single stem, brown, 30 to 40 cm, branchless, stiff, erect *(A. hispida)* erect, up to 2 m, bristle spines, branching, brown *(A. racemosa)* erect, up to 2 m, smooth, branching.
Leaves: *(A. nudicaulis)* whorl of 3 pinnately compound, 5 to 7 leaflets, commonly 5, leaflets ovate, acute, serrate, green (A. hispida) alternate, pinnately compound, leaflets, 5 to 7, ovate, acute, serrate, green (A. racemosa) alternate, pinnately compound, leaflets 11 to 15, large, obovate to ovate, acute, serrate, green.
Flower Type: Green, small, 5 petals, in terminal umbels, spring.
Fruit: Blue-black berries, summer.
Roots: Lateral rhizome.
General: Perennial herb, common.
Habitat: *A. nudicaulis* and *A. racemosa* are easily found in most rich maple hardwood forests in the U.P. *A. hispida* is found in open forests and fields in sandy soil.
Season of Availability: The roots of all three are collected in the fall. The berries of all three are collected in late summer.
Preparation: The roots are used fresh or dried in a decoction. The berries are eaten fresh or used in an infusion.
Medical Terminology: It is considered an alterative, stimulant, diaphoretic, and aromatic (10, 30, 38, 44, 58, 73). The average dose recommended by the National Formulary is 2 gm of ground root (2).
Related Disease Symptons: The root tea has been used to cure backache (36, 38, 40). The Chippewa put the dried and powdered root up the nostrils to stop nose bleeds (10). The powdered roots, alone or equally mixed with *Acorus calamus*, were used as a cough remedy (40). The Indians used the root tea as a carminative and pectoral in coughs and chest pains (9). The fresh root was pounded, put in cloth, and applied as a poultice for skin sores (10, 73, 74, 75, 76). Indians of this area pounded the roots and used the mash as a poultice to cure burns, sores and swellings (73, 74, 76). A tea of the roots was used for bad coughs (10, 32, 75).

Poisonous Aspects: No poison aspects have been reported with the above Aralia species but, Kingsbury reports cases of poisoning by *Aralia spinosa* (33).

Biological: The root teas have been used for their nutritional qualities for years (10, 15, 63). The root is an ingredient in root beer (15).

Commercial: The roots can be gathered and sold to drug companies (37).

Personal Experimentation: I have found that the berries of each taste the same and the tea from the berries is also the same. Their taste is that of sweet gin, leaving a dry raspy after-taste if many are eaten. The root tea is bland; I have drunk over a pint at one sitting and noticed no effects what so ever.



Aralia spp.

18. Arctium spp.
Arctium lappa and A. minus

Family: *Compositae*
Common names: Burdock, stickers, clotbur, harebur, burrseed, gobo.
Stem: Ribbed, hollow, red, stout, up to 2 m, only second year plants have stems, branching.
Leaves: Alternate, heart-shaped, long petioles, rosette the first year, upper leaves ovate, serrate, up to 7 dm, green.
Flower Type: Purple, sessile, borne on short terminal peduncles, solitary or in racemes, tubular, green bracts, heads 2 cm across, summer.
Fruit: Brown spiny fruit, containing many flat rounded achenes, fall.
Roots: Large stout taproot.
General: Biennial herb, common.
Habitat: Both species grow side by side in fields and along roadsides.
Season of Availability: The root of the first year plant is collected in the late summer and fall.
Preparation: The root is used fresh in a poultice and fresh or dried in a decoction.
Medical Terminology: Therapeutically, *Arctium* is diuretic (52) alterative (58) and diaphoretic (10,22,35,38,44,51,55, 56,63,66,68). It has been thought to be an aphrodisiac (18). The first year root has been considered official with the average dose of 2 grams (2).
Related Disease Symptoms: The root was prescribed as a cure for gonorrhea and syphilis (35,36,38,40). A salve made from the root was used to heal and sooth burns, wounds and skin irritation (22,32,35,36,38,44,51). The tea was taken as a blood purifier (18,27,36,44,57,76). It was used by the Meskwaki women as a medicine for labor (63,73). The tea was used to relieve stomach pain and as a general tonic (36, 63,75). The tea was used for pleurisy cough (10,36,63).
Poisonous Aspects: The plant has exhibited hypoglycemic activity (40). The plant has caused contact dermatitis (46).
Biological: In antibiotic experiments, *Arctium minus* has shown gram + bacterial growth inhibition (57). The first year root of the biennial is edible (18,25,34,47). In the Orient, the edible root is grown commercially.
Chemistry: The root contains the compound *inulin* and the glucoside *lappin* (58).
Commercial: The root has been purchased by drug companies (37).
Personal Experimentation: I have eaten the first year root many times, either fried or steamed with other vegetables or

alone with salt and butter. I have never noticed any strange or harmful effects.

Arctium spp.

Arctostaphylos uva-ursi.

19. Arctostaphylos uva-ursi

Family: *Ericaceae*
Common names: Bearberry, kinnikinick, uva-ursi
Stem: Prostrate, reddish brown shredding bark, woody, rarely over 1 dm tall.
Leaves: Alternate, evergreen, spatulate, 1 to 3 cm long, leathery, brittle, shiny surface, entire, distinct netted veins.
Flower Type: White, terminal racemes, bell-shaped, 5 to 15 mm long, spring.
Fruit: Red mealy berry, 1 cm in diameter, edible, fall.
Roots: Prostrate taproot.
General: Perennial shrub, mat forming, dense, common.
Habitat: This plant is very common in rocky sandy soil in open woods and fields.
Season of Availability: The leaves are gathered in the fall.
Preparation: The leaves are used in an infusion, fresh or dried.
Medical Terminology: Therapeutically, kinnikinick is diuretic (10,27,31,41), astringent (5,19,22,68) and tonic in action (32,44,50,51,58,63,74). Some also consider the leaves to be antiseptic (1,10,19). The National Formulary's recommended dose is 2 gm of ground leaves (2).
Related Disease Symptoms: Bearberry has been used to heal and relieve back pain and kidney problems (23,24,47,63). The extract from the leaves has been used for urinary tract infections and problems (5,19,22,30,32,36,39,40,47,51,63). The Chippewas smoked the dried pulverized leaves mixed with *Salix spp.* to stop the pain from headaches (10). It has been used in treating leucorrhea, cystitis (5,51,74), diarreha, chronic bronchitis and passive hemorrhages (30,32).
Biological: The leaves were smoked by many northern tribes of American Indians (10,30,36,40,76). The berries are edible (15,19,25,47). In antibiotic experiments, kinnikinick inhibited gram + bacteria (57).
Chemistry: The leaves contain *tannic* (22) and *gallic* acids (51,58) and *quercetrin* (1). The leaves also contain *arbutin* (1,31), *ericolin* and *urson* (51,58).
Commercial: A commercial product called 'Doans Pills' contains an extract from the leaves of this plant.
Personal Experimentation: I have ingested over 1 quart of the tea made from leaves of this plant with no ill effects. I have been drinking the tea periodically since 1973.

Arisaema triphyllum.

20. Arisaema triphyllum

Family: *Araceae*
Common names: Jack-in-the-pulpit, dragon root, Indian tulip, wake robin, devil's ear, bog onion.
Stem: Erect, 30 to 70 cm, branchless, green.
Leaves: 2 opposite long petioled compound leaves, 3 elliptic to rhombic-ovate green leaflets, 4 to 6 cm long.
Flower Type: Solitary, terminal, purple-green, born on a long peduncle, cupshaped with one side longer than the other making an acuminate flap over the spadix, spring.
Fruit: Scarlet berries, in an egg-shaped cluster, easily noticed because they stand alone, fall.
Roots: Bulbous root, corm, it is largest in the fall, 5 to 8 cm in diameter.
General: Perennial herb
Habitat: Jack-in-the-pulpit is commonly found in damp woods and along stream sides.
Season of Availability: The bulbous root is harvested in the fall.
Preparation: The root is used dried in an infusion. Fresh, it is used for special reasons, dealing directly with its calcium oxalate content.
Medical Terminology: Therapeutically, *Arisaemea triphyllum* has been considered an expectorant (32,36), a diaphoretic (27,44) and an irritant (19,22,38,58,63).
Related Disease Symptoms: The corms have been grated, boiled in milk, and the infusion was used to treat coughs and tuberculosis (36). Ground corms were also taken for bowel complaints and constipation (63). The corms have been used to treat asthma (36,51) and bronchitis (27,52). The dried corm has been recommended for many catarrhal affections (27,51). For flatulant colic, a tea from the corms was administered (32,36,63). When sore eyes were encountered, the Chippewas washed them with an *Arisaema triphyllum* root decoction (10,74,75). The corms have been incorporated in rheumatism treatment (36,51,52).
Poisonous Aspects: The plant is known to have caused contact dermatitis (40). No known deaths have been caused by *A. triphyllum* (33).
Biological: The corms, dried for a few months, can be ground into flour or eaten plain (15,19,76).
Chemistry: Calcium oxalate crystals are contained in the plant (19,22,32,33,38,40,58). The needle-like crystals become embedded in the mucous membranes and provoke intense irritation and a burning sensation (33,40).

21. *Artimisia absinthium*

Family: *Compositae*
Common names: Wormwood, absinthe
Stem: Many branching stalks from the same rootstock, woody at the base, up to 1.5 m, green with white pubessence, persistent for 1 year.
Leaves: Alternate, highly dissected, almost fern-like, green with white pubesence, 5 to 10 cm long.
Flower Type: Yellow discoid flowers, in a terminal spike, 4 to 8 mm across, summer.
Fruit: Small brown sliver-like achenes.
Roots: Fiberous
General: Perennial herb, aromatic
Habitat: The plant grows commonly in fields and along roadsides throughout the Upper Peninsula and the Great Lakes region.
Season of Availability: The herb is collected in late summer and fall.
Preparation: The herb can be used fresh or dried in an infusion.
Medical Terminology: Therapeutically, it is considered to be tonic (32, 58), anthelmintic (5) and a stomachic in action (10, 22, 51, 63). It is also considered to be a stimulant (10, 22, 32, 58, 63). The oil is used as a therapeutic component in liniment (53).
Related Disease Symptoms: The Chippewas of Wisconsin and Minnesota boiled the herb and made a compress with the tea and herb for sprains and strained muscles (10). It is used as a bitters for indigestion (19,22,32,69).
Poisonous Aspects: *A. absinthium* has no recorded toxicity, but Kingsbury reports on *Artemisia* as a genus about its toxicity and states a few examples using western species (33). Very large doses are thought to cause death (5) from epileptiform convulsions (32). The pollen has caused hayfever and the oil has caused contact dermatitis (40).
Biological: Incense was made from the herb for spiritual reasons (24).
Chemistry: The volatile oil contains *thujone* (31). The plant contains *absinthin* (51) and *tannin* (58).
Commercial: The main production of wormwood is located in southern Michigan (53). The volatile oil is available through steam distillation (22,29,32,58). It was used as the main flavor in the alcoholic drink absinthe (22,29,58). It has been used in the making of beer as the main flavoring (19).
Personal Experimentation: I have drunk 1 quart of the tea at one sitting with no ill effects. The tea is extremely bitter. I

have noticed that as I drank it over many months, I acquired a taste for it and found it pleasing. I have used the tea for bath water and have noticed an exhillarating and soothing feeling in my muscles and body. A friend, after hearing of this, repeated the experiment. He also noticed a distinct stimulation feeling.

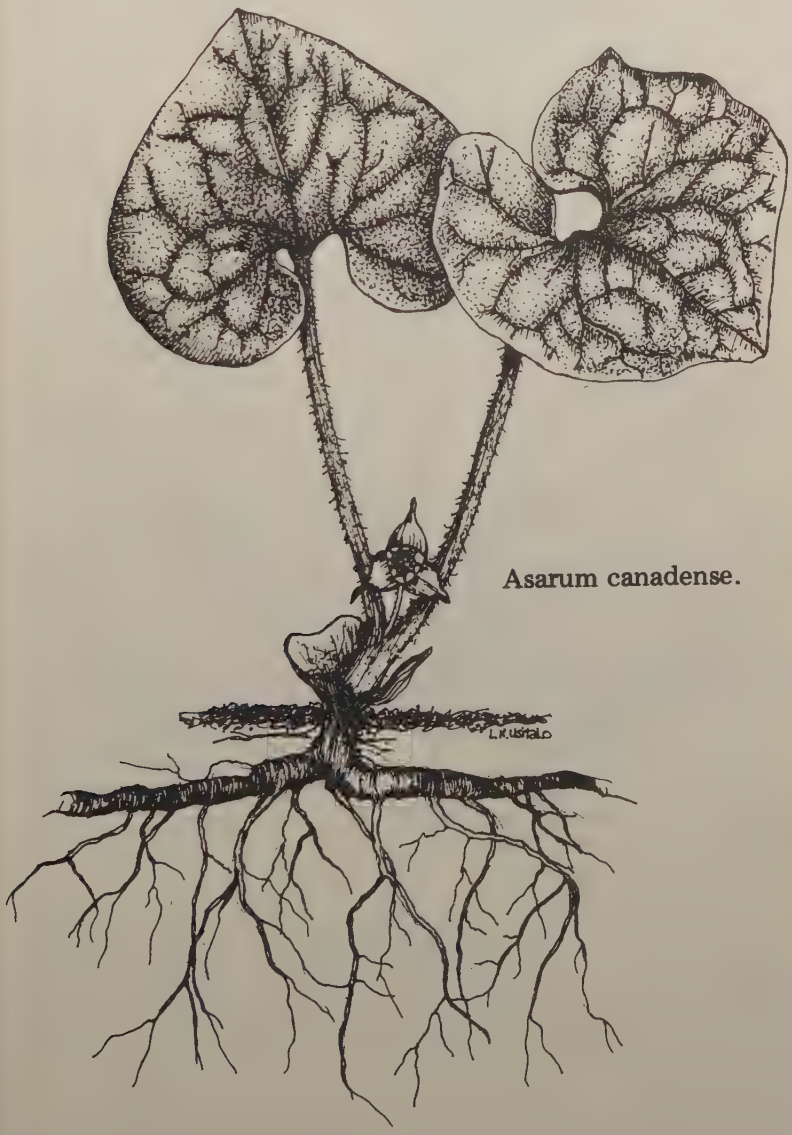
Artemisia absinthium.

22. Asarum canadense.

Family: *Aristolochiaceae.*
Common names: Wild ginger, black snakeroot, coltsfoot, broad-leaved sarabacca.
Stem: Stemless.
Leaves: Whorled, long petioles (10 to 15 cm), roundish heart-shaped leaves, deep green, 6 to 8 cm broad, acuminate.
Flower Type: Reddish brown, bell-shaped with 3 lobes, y-shaped, at the base of the leaves, 1 to 3 cm across, early spring, early summer.
Roots: Creeping rhizome, aromatic, ginger-smelling.
General: Perennial herb, grows in clumps.
Habitat: I have found the wild ginger along streams in rich moist hardwood stands.
Season of Availability: The roots are harvested in the fall of the year but, can be collected anytime as the ginger flavor is always prevalent.
Preparation: The roots are used in a decoction or tincture, fresh or dried.
Medical Terminology: It has been used as an aromatic stimulant (36, 51, 58) and a diaphoretic (22, 27, 32). For flatulence (18 32, 44), it is used as a carminative (22, 58). It is also considered a tonic (38, 51, 58). The dried rhizome and roots have been considered official with the average dose of 2 grams (2).
Related Disease Symptons: A tea taken internally was used to relieve stomach gas (18, 30, 32, 36, 38, 63, 74, 76). To relieve aching head and eyes, the powered root was inhaled like snuff (36, 63). It has been used externally applied to wounds to prevent bleeding (63). It has been used for throat trouble, earache, sore ears, lung trouble, and stomach cramps (63). Canadian Indians drank a root infusion to relieve heart arrhythmia (40) The Catawabas employed a ginger remedy to relieve heart pains (40). To cure ear infections, the Meskwakis steeped the roots and poured the tea directly into the ear (40, 73). For indigestion, the root was eaten (10).
Poisonous Aspects: No recordings of *A. canadense* toxicity have been reported but, *A. europaeum*, the species in Europe, is considered toxic and is documented as being so (33). Wild ginger has caused contact dermatitis (46).
Biological: The Meskwaki Indians used the juices of the root as fish bait (73). In antibiotic experiments, wild ginger inhibited gram + bacteria (57). Two antibiotics have been isolated from this plant (57, 63).
Chemistry: Wild ginger contains *aristolochic acid*, which has known antimicrobial properties (40). It contains *arasol* (51,58).

Commercial: The roots can be used just like commercial ginger (15, 25, 36, 38, 63). The roots can be collected and sold to drug companies (37).

Personal Experimentation: I have ingested one pint of the root decoction at one sitting and noticed no effects whatsoever. The taste is that of strong ginger.



Asarum canadense.

Asclepias syriaca.

23. Asclepias syriaca.

Family: *Asclepiadaceae.*
Common names: Milkweed, silkweed.
Stem: Unbranched, stout, downy, grayish-green, erect, milky sap, up to 2m.
Leaves: Opposite, ablong-ovate to elliptic, acute, thick, fuzzy, entire, green, 8 to 15 cm long.
Flower Type: Pink to white, in globose umbels, originating from the leaf axils, early summer.
Fruit: Ovoid pods, green turning to brown and splitting open, 6 to 8 cm long, inside there is silky white hairs each connected to a flat round seed, late summer, fall.
Roots: Taproot.
General: Perennial herb, grows in clumps.
Habitat: Milkweed grows commonly throughout the region in open fields and along road sides.
Season of Availability: The roots are collected in the fall. The herb is collected in the late summer as is the milky sap.
Preparation: The roots are used in a decoction, either fresh or dried. The milky sap is used topically, fresh or dried.
Medical Terminology: Milkweed root is emetic and cathartic in large doses (10, 32, 36, 52, 58). In average doses it is considered diuretic (10, 36), expectorant and diaphoretic (32, 38, 58).
Related Disease Symptoms; A root tea was taken for the cure of dropsy (40), dysentery and asthma (63). The Natchez Indians used a root decoction for kidney trouble, including Bright's disease (63). Milkweed was used in the treatment of syphilis (63). The juice of milkweed was rubbed on warts to make them disappear (36, 38, 52, 63). The root of *A. syriaca* was used as a female remedy among the Ojibwe (63). A tea of the root was used by the Chippewas as a remedy to produce the flow of milk (10, 54). The roots have been used to treat rheumatism (30, 32, 58).
Poisonous Aspects: Kingsbury reports that the *Asclepias* genus in general has toxic compounds throughout each species (33). He reports on a paper by Reynard (Maryland Agr. Exp. Sta. Tech. Bull. A10, 1942) that talks of *Asclepias syriacia's* toxicity (33).
Biological: The young shoots (9,15), unopened flower buds and young seed pods are edible (18, 25, 74, 75, 76).
Commercial: The American Indians used the fibers for cloth and thread (6, 29, 74). The silky hairs on the seeds have been used for stuffing (29) and as a substitute for kapok (6).

Asclepias tuberosa.

24. Asclepias tuberosa.

Family: *Asclepiadiaceae.*
Common names: Butterfly weed, pleurisy root.
Stem: Erect, rough, hairy, branching only at the top, up to 1 m, green.
Leaves: Alternate, lanceolate to oblong, 10 to 15 cm long, acute, green.
Flower Type: Orange, in terminal umbels, each flower 5 to 10 mm across, summer.
Fruit: Long slender seed pods, 8 to 12 cm long, green turning brown and spliting open exposing silky hairs connected to brown flat round seed, summer, fall.
Roots: Taproot.
General: Perennial herb.
Habitat: The plant grows in sandy soils in open fields and along roadsides.
Season of Availability: The tuberous roots are collected in the fall.
Preparation: The roots are used in a decoction, fresh or dried.
Medical Terminology: Therapeutically, *Asclepias tuberosa* is considered diaphoretic and expectorant (9, 22, 32, 38, 44, 51, 58, 63, 72, 73). In large doses, its action is emetic (36, 38) and purgative (22, 32, 44, 58, 63).
Related Disease Symptons: It has been used in pulmonary and bronchial affections and for rheumatism (30, 32, 36, 58, 63, 72). The ground roots were used fresh or dry as a poultice for open sores and bruises (36, 40, 63, 72, 74). As a healing agent, the Ohmahas placed the chewed roots on wounds and sores (40). The root tea has been used for pleurisy, thus the name pleurisy root (9, 22, 63, 72).
Chemistry: The root contains the glucoside, *asclepiadin* (58).
Commercial: The root can be gathered and sold to drug companies (37).

Baptisia tinctoria.

25. Baptisia tinctoria.

Family: *Leguminosae.*
Common names: Wild indigo, rattleweed, clover bloom, yellow broom.
Stem: Branching, slender, smooth, green, up to 1 m.
Leaves: Alternate, compound, 3 obovate leaflets, each 1 to 2 cm long, wedge-shaped at base, stipulate, green.
Flower Type: Yellow, 1 to 3 cm long, 10 stamens, 2 lipped calyx, born in a loose terminal raceme, spring, summer.
Fruit: Papery to woody, inflated pod, 5 to 15 mm long, summer, fall.
Roots: Taproot.
General: Perennial herb.
Habitat: *B. tinctoria* flowers from late May to September in open fields and along roadsides.
Season of Availability: The roots are collected in the fall.
Preparation: The roots are used fresh or dried in an infusion or decoction.
Medical Terminology: Therapeutically, *Baptisia tinctoria* has been considered cathartic (38) and emetic in large doses (22, 36, 51, 58, 63). However, it is mainly used for its antiseptic properties (22, 36, 38, 51, 63).
Related Disease Symptons: The roots steeped in water have been applied to cuts and sores as an antiseptic wash (22, 30, 32, 36, 51, 63). A poultice made from the root was used to treat skin ulcers (22, 30, 32, 36, 63). A tea of the root was used as a gargle in malignant and scarlatinal sore throat (32). It has been used in the treatment of typhoid fever (22, 32). Experimentation was done with *Baptisia tinctoria* treating the disease, typhoid (32). It has been used in a fomentation to abate swelling and counteract the poison in rattlesnake bites (63).
Poisonous Aspects: *Baptisia* is considered toxic to livestock (33).
Chemistry: It contains the glucoside *babtisin* (51) and the alkaloid *cystine* (58). It also contains the acrid poison, *baptisine* and a purgative glucoside, *baptin* (51).

Berberis vulgaris.

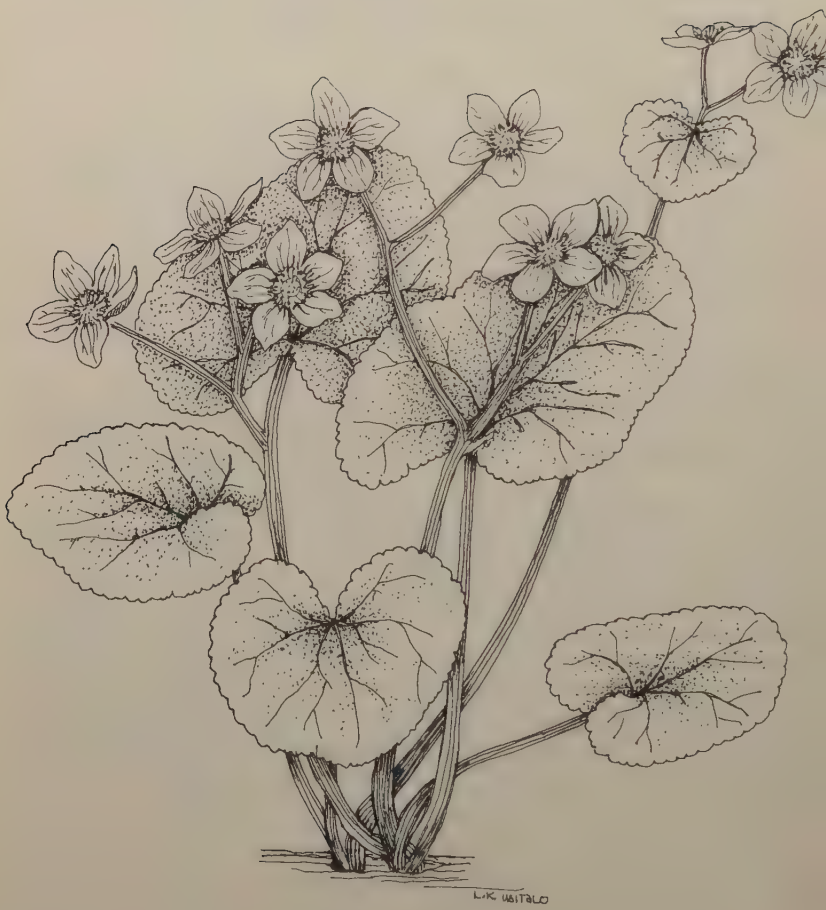
26. Berberis vulgaris.

Family: *Berberidaceae.*
Common names: Barberry.
Stem: Branching, gray to yellowish gray bark, up to 3m, spiny, three pointed barbs along stem.
Leaves: Alternate, obovate to ablong-ovate, 2 to 5 cm long, spinulose to denticulate margins, green.
Flower Type: Yellow, 6 petals, 6 sepals, 6 stamens,borne in acial many flowered drooping racemes, spring.
Fruit: Scarlet ellipsoid single seeded berry, 1 to 3 cm across, fall.
Roots: Lateral taproot.
General: Perennial bushy shrub.
Habitat: It is commonly found along roadsides in thickets and fence rows in fields.
Season of Availability: The root, root bark, stem, and fruit are collected in the fall.
Preparation: The roots, rootbark, and stem bark are dried first for preparations. The stem, root bark are used in a decoction. The berries are used fresh.
Medical Terminology: The bark has been used as a bitter tonic (1, 22, 30, 51, 58). The bark is considered a febrifuge (22, 32). It is also considered an antiseptic, laxative, stimulant, and tonic (30).
Related Disease Symptons: A drink of the berries was used to reduce fever (22, 32, 36, 58). The root bark has been used to treat diarrhea, dysentery, and jaundice (30, 36, 38). In Europe, a root infusion was used to treat dyspepsia (22, 36, 38). The berries have been used in treating vitamin C deficiencies (22, 36, 38).
Biological: The fruits are considered edible (15).
Chemistry: Barberry roots contain the alkaloid *berberine* (22, 32, 40, 51, 58). Commercially, the alkaloid is obtained by alcohol extraction (22, 30, 32).

Betula alleghaniensis.

27. Betula alleghaniensis.

Family: *Betulaceae.*
Common names: Yellow birch
Stem: Golden yellow bark, black longitudinal splits, prominate lenticels, young twigs very smooth and red, up to 30 m.
Leaves: Alternate, ovate to oblong-ovate, sharply doubly serrate, acute, rounded base, petiolate, green.
Flower Type: Catkins.
Fruit: Winged samara in a catkin.
Roots: Taproot.
General: Perennial deciduous tree, lumber tree.
Habitat: The tree grows in sandy loam soils. It is found across the great lakes in old fields and mixed with sugar maples.
Season of Availability: The small twigs are collected in the spring, summer, fall and winter.
Preparation: For an infusion, the twigs are steeped fresh. The oil is obtained by steam distillation or alcohol extraction. The twigs were collected by the Potawatomis for a medicinal tea (63, 76).
Medical Terminology: The yellow birch is considered antiseptic (31) and astringent in action (38, 50). In the pharmaceutical preparation, birch tar, it is used as a local stimulant (31).
Related Disease Symptons: The black birch, a relative of the yellow birch, growing in Minnesota, was used as a tea for stomach pains by the Chippewa (10).
Biological: The yellow birch is used for the same things as the sweet birch, *Betula lenta* (15). The sap, taken in spring, has been used for the making of birch beer (36, 38). The sap is also used to make a sugar syrup (15, 75). The inner bark of all birch trees can be pulverized into an edible flour (79).
Chemistry: The bark and twigs contain the volatile oil, *methyl salicylate* (15, 31, 36, 38, 58, 59).



Caltha palustris.

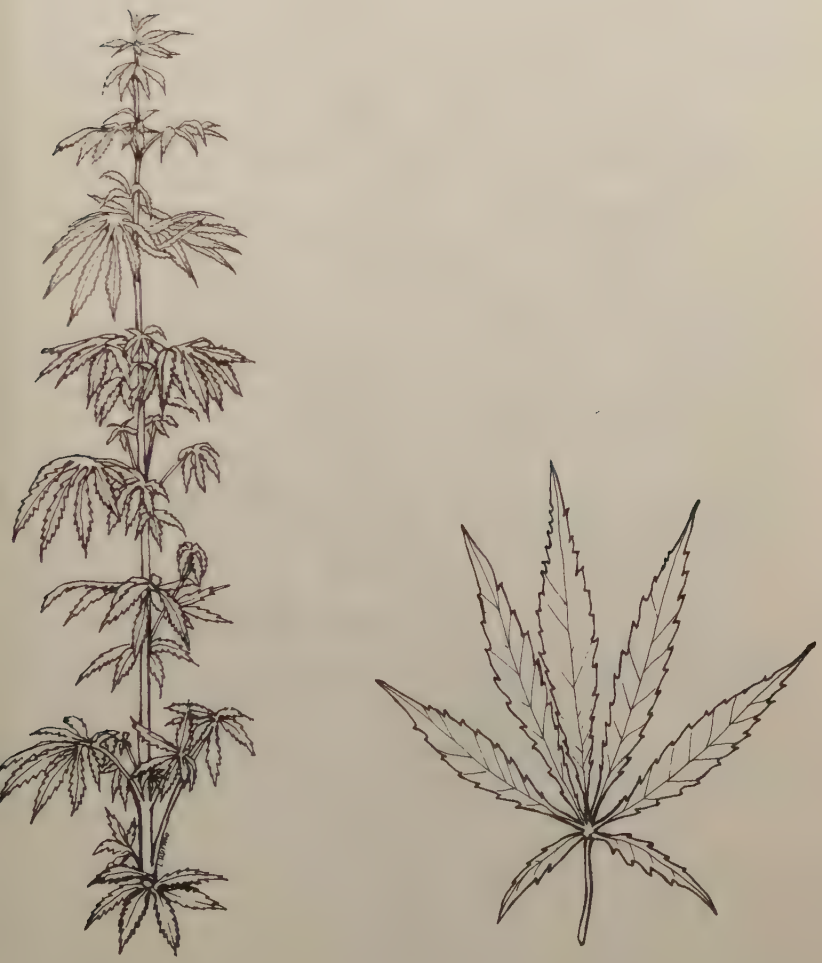
28. Caltha palustris.

Family: *Ranunculaceae.*
Common names: Marsh-marigold, cowslip, may-blob.
Stem: Hollow, green, furrowed, erect, branching, up to 8 dm.
Leaves: Green, roundish to open reniform, dentate, alternate, up to 20 cm across, edible, spring.
Flower Type: Yellow, 5-9 petal-like sepals, 10-40 stamens, 5-10 pistils, 3 cm across, spring.
Fruit: Green follicle, 1-1.5 cm long, prominent beak, spring.
Roots: Fiberous.
General: Grows in large groups, perennial herb.
Habitat: Wet muddy areas, stream banks, marshes.
Season of Availability: The leaves are collected in the spring.
Preparation: Boil or steam the leaves in two waters. Serve with butter and/or vinegar. The boiled flower buds can be placed in pickle juice and eaten as pickles (15, 19).
Related Disease Symptons: Marsh-marigold has been used to treat warts, dropsy, and anemia (19). It has also been used as an expectorant for cough syrups (10,19). For warts, a drop of the leaf juice was applied daily until the wart disappeared (19). The Chippewa applied the dried powdered and moistened or fresh root of cowslip twice daily to cure scrofula sores (10).
Poisonous Aspects: The leaves must be boiled to destroy a bitter toxic substance (15, 47).
Biological: The leaves are edible after boiling in two waters (15, 19, 25, 47, 78). Young immature green flower buds can be placed in salt water or pickle juice and eaten as pickles (15, 19, 25, 78).
Chemistry: The plant contains a poisonous glucoside, which is expelled by boiling (19). The poisonous principle is volatile, thus after drying it is harmless (33). The plant is known to contain *anemonin* (33).
Personal Experimentation: It is extremely important to boil the leaves in two waters, otherwise the taste will be so bitter that one will never be able to eat them. I find it easiest to collect the single leaves, place them in boiling water for 3-5 minutes, dump the water, pour in cold water, heat to boiling and leave boiling for 3-5 more minutes at which time you can drain the water and serve with margarine and vinegar or with tomato sauce and cheese.

29. *Cannabis sativa.*

Family: *Cannabinaceae.*
Common names: Hemp, marijuana, reefer, pot.
Stem: Branching only at the top, scabrous, green, up to 3 m, fiberous.
Leaves: Alternate, palmately compound, 3 to 15 linear-lanceolate coarsly toothed leaflets, green.
Flower Type: Green, dioecious; staminate in axillary compound racemes, 5 sepals, 5 stamens; pistillate in spikes along the branches, late summer.
Fruit: Hard round achene, 2 to 5 mm in diameter, brown, shiny, fall.
Roots: Taproot.
General: Annual herb, not real common, brought to this area through cultivation.
Habitat: The plant has been reported growing in fields and along roadsides. It does not grow naturally, it has been introduced by man. Cannabis is illegal to cultivate in the U.S.
Season of Availability: The plant is collected in the late fall. It is then dried by various techniques to achieve color and quality. The leaves and flowers are collected.
Preparation: The leaves and flowers are dried and used by smoking or in an infusion. The plant is smoked, made into a tea, and/or cooked and eaten (1, 29, 68).
Medical Terminology: The plant has and is used by man to achieve euphoric sensations (1, 4, 8, 29, 32, 33). It is considered to be an anodyne, hupnotic, and antispasmodic (5, 29, 36, 68) It has been thought to possess aphrodisiac properties (40). Cannabis is considered an intoxicant (1, 5, 8, 32, 33, 36, 40, 51, 56). The dose for smoking is 200 to 250 micrograms per 1 kilogram of body weight and 300 to 480 micrograms per kilogram of body weight for ingesting (40).
Related Disease Symptons: *Cannabis* has been used to treat glaucoma (40). Marijuana has been employed as a sedative in cases of sleeplessness due to nervous exhaustion or acute neuralgia (1, 29, 32, 36, 68).
Poisonous Aspects: The drug produces a pleasurable sensation, loss of time, difficulty in concentration and can cause vomiting (26). The leaves and flowers have caused dermatitis (46). The pollen is a cause of hayfever (40). One case of animal poisoning in Greece is reported by Kingsbury (33).
Biological: In antibiotic experiments, *Cannabis* has inhibited gram + bacteria (40). The drug produces physiological activity (26, 33).
Chemistry: *Cannabis* contains *tetrahydrocannabinol* (4). It also contains *cannabidiol* (1, 31, 33).

Commercial: The stems of the male plant have been collected and used on a commercial basis for fever (3, 29). In the United States, there are legal restrictions for possession, use, and trade of reefer (1, 29, 33, 68).

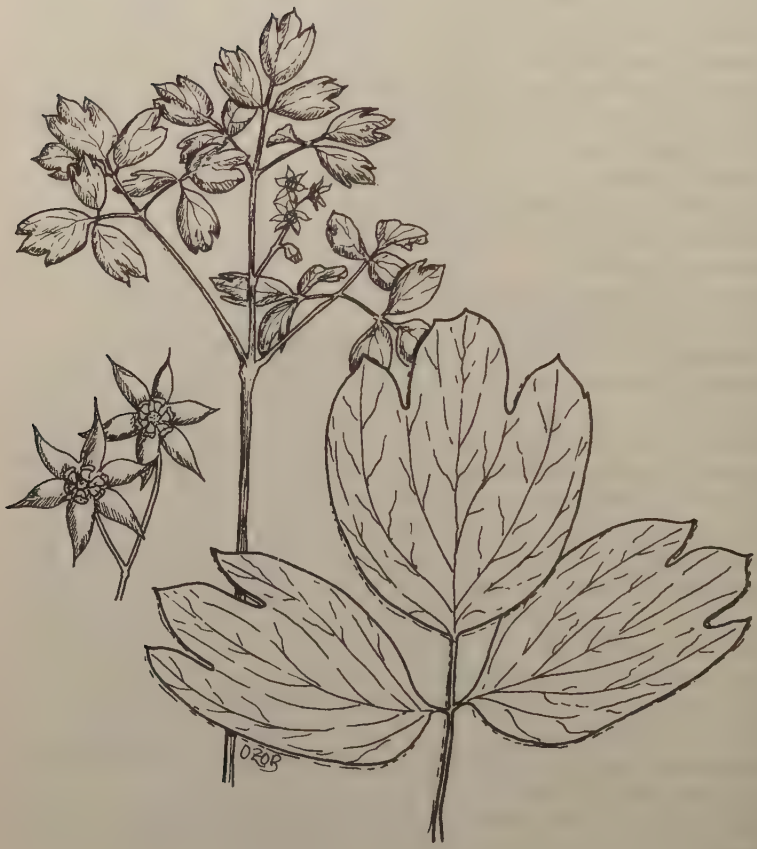


Cannabis sativa.

Capsella bursa-pastoris.

30. Capsella bursa-pastoris.

Family: *Cruciferae.*
Common names: Shepard's purse, case weed, shovel weed.
Stem: Smooth, 1 to 6 dm tall, few branches, green.
Leaves: Alternate, basal leaves in a rossete; basal leaves toothed, linear-lanceolate, 5 to 10 cm long; cauline leaves progressively smaller, sagitate, sesslie, green.
Flower Type: White, 4 petals, 2 to 4 mm long, 4 sepals, in a terminal raceme, spring, summer, fall.
Fruit: Green, later turning brown, heart-shaped silicle, 5 to 10 mm long, spring, summer, fall.
Roots: Taproot.
General: Annual herb, common.
Habitat: *Capsella* is found along roadsides, in lawns, and in many open fields.
Season of Availability: The herb is collected throughout the spring, summer, and fall.
Preparation: The herb is used fresh or dried in an infusion.
Medical Terminology: *Capsella* is thought to be a tonic, ascorbutic, and astringent (30, 32, 35, 58, 68). Others attribute the herb's action to be diuretic (27, 30, 35, 36, 68).
Related Disease Symptons: The Cheyenne Indians made an infusion of the leaves and stem, cooled it, and used it to treat headache problems (24, 70). To cure earaches, a strong decoction of the herb was used as ear drops (22, 30, 68). A tea from the herb was used by the Chippewa for stomach cramps (10). Capsella has been used to stop bleeding from the kidneys (22, 27, 32, 36, 41, 55). The tea has been used to check profuse menstruation (22, 35, 36). For poison ivy rash The Menominee steeped the herb and used the tea as a wash (70).
Poisonous Aspects: I couldn't find any cases of poisoning of any sort on Capsella.
Biological: Experiments on animals have shown that the extract has a marked tonic effect on the uterine muscles similar to that of ergot (7).



Caulophyllum thalictroides.

31. Caulophyllum thalictroides.

Family: *Berberidaceae.*
Common names: Blue cohosh, papoose root, blueberry.
Stem: Branchless, up to 1 m, usually about 6 dm, green.
Leaves: Usually only 2 leaves, terminal, 2 to 3 times compound in groups of 3's, the main divisions petioled;, leavlets 2 to 3 lobed, obovate, wedged-shaped at the base, pale green.
Flower Type: Yellow to green, 6 petals, 6 sepals, 1 to 2 cm across, borne in a loose terminal raceme, spring.
Fruit: Round blue drupes, looking similar to a blueberry, summer.
Roots: Lateral taproot.
General: Perennial herb.
Habitat: *Caulophyllum* grows in rich moist hardwood stands and along streams in hardwood stands.
Season of Availability: The roots are collected in the fall and allowed to dry.
Preparation: The roots are used in a decoction. A tea is made from the plant's root and rhizome (30, 36, 44, 63).
Medical Terminology: The rhizomes and root of blue cohosh are said to have sedative properties (10). It is considered a diuretic and emmenagogue (10, 30, 32, 35, 44, 51, 58). The dried rhizome and roots have been considered official with the average dose of .5 grams.
Related Disease Symptons: Many American Indian tribes used the root tea to facilitate child birth (9, 30, 32, 35, 36, 38, 63, 76). Blue cohosh has been used to treat rheumatism, bronchitis (51) and colic (30, 32, 35, 36, 38). The root decoction has been used to promote menstruation (35, 36, 40, 63, 73, 74, 75, 76). A root tea was used by the Chippewas for lung trouble (10). The same root tea mixed with the root of Rudbeckia laciniata, was used for indigestion (10).
Poisonous Aspects: The rootstocks have caused dermatitis (46). Children have been poisoned by eating the blue berries (40).
Chemistry: The leaves and seeds contain the alkaloid *methylcystine* (40, 58). It also contains a glucoside called *leontin* (1).
Commercial: The roots can be sold commercially (37).

Ceanothus americanus.

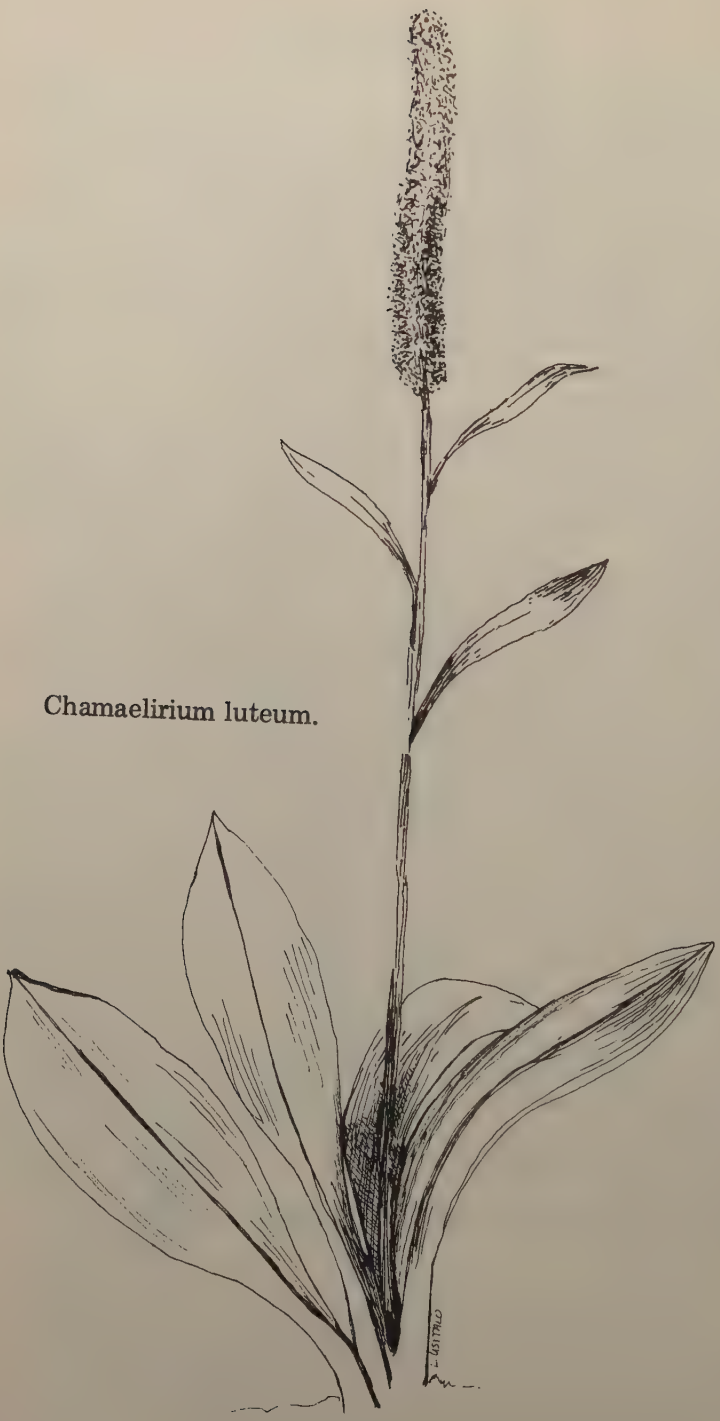
32. Ceanothus americanus.

Family: *Rhamnaceae.*
Common names: Red root, New Jersey tea.
Stem: Branching, erect, grayish-green, up to 1 m.
Leaves: Alternate, ovate, 3 to 8 cm long, serrate edges, acute, dark green top, pale green bottom.
Flower Type: White, 5 lobed calyx, hooded petals, terminal umbel-like corymbs, spring, summer.
Fruit: 3 lobed brown carpel, summer.
Roots: Red taproot.
General: Perennial herb, bushy in appearance.
Habitat: *Ceanothus* grows in dry upland woods and open fields.
Season of Availability: The root is collected in the fall. The leaves are collected in summer and fall.
Preparation: The root is used dried or fresh in a decoction. The leaves are usually dried, but may be used fresh, in an infusion. A tea is made from *Ceanothus.* The tea has been used by the American Indians and the early colonists (9, 15, 18, 25, 32, 36, 38, 62, 70).
Medical Terminology: The root was used as an astringent, stimulant, antispasmodic, expectorant, and sedative (30, 35, 38, 44, 68). Both the leaves and the root have been employed internally and externally as an astringent (32, 51, 73, 74).
Related Disease Symptons: A tea of the root was used to reduce high blood pressure (38). The tea was also used to treat enlarged spleen (30, 35, 38). It has been used against syphilis and gonorrhea (22, 30, 36). Five inches of the root, grated, and boiled in one quart of water was used by the Chippewa to stop coughs (10). For mouth sores, the tea was utilized as a gargle (35, 36, 44, 68). Supposably, it was used for asthma, bronchitis, and pulmonary complaints (35, 68).
Chemistry: As an organic dye, the roots imparts a cinnamon color to wool (22, 27). The roots contain *tannin* and the active principle *ceanothin* (51), which tends to increase the rate of blood clotting (22, 27, 58).

Celastrus scandens.

33. Celastrus scandens.

Family: *Celastraceae.*
Common names: Climbing bittersweet, bittersweet, climbing orange root, waxwork.
Stem: Twining shrub, up to 18 m long, trunks up to 2.5 cm thick, woody.
Leaves: Alternate, oblong to ovate, acuminate, serrulate, 5 to 10 cm long, green.
Flower Type: Green, polygamodioecious, crenulate petals, 5 stamens, in terminal panicles, spring.
Fruit: Orange subglobose capsule.
Roots: Taproot.
General: Climbing vine, perennial, decidious.
Habitat: The twining plant is found in thickets along roadsides and in old fields.
Season of Availability: The bark of the root is collected in the fall.
Preparation: In a decoction or infusion, the bark can be utilized fresh or dried.
Medical Terminology: Medicinally, bittersweet is considered a diaphoretic, diuretic, and alterative (10, 32, 36, 44, 58, 68). The root is considered a mild narcotic (32, 58). The tea was used for babies as a physic (10).
Related Disease Symptons: The root bark tea was utilized in liver affections (51), rheumatism, and obstructed menstruation (68). The plant has been used to treat leucorrhea (40, 68). It has been taken internally to induce vomiting, to quiet disturbed people, to treat venereal disease, and to increase urine flow (36). Mixed with grease and utilized as an ointment, it was used to treat skin cancers, tumors, burns, and swellings (36). To treat skin eruptions, the Chippewa used a decoction of the stalk as a wash (10). Tea from the root bark was used to start menstrual flow (36).
Poisonous Aspects: Cases of horses being poisoned by eating the leaves have been reported (46). This plant is considered poisonous (40, 46).
Biological: The tender branches and the sweetish bark of bittersweet were boiled and eaten for food by the Chippewa (15, 74, 76).
Chemistry: The fruits and leaves contain *euonymin* (46).



Chamaelirium luteum.

34. Chamaelirium luteum.

Family: *Liliaceae.*
Common names: Blazing star, helonias, devil's bit, star root, false unicorn.
Stem: Single 2 to 12 cm high stem, green.
Leaves: Alternate, flat lanceolate, getting progressively smaller up the stem, entire, green, rosette of basal leaves.
Flower Type: Dioecious; staminate white; pistillate green; 6 narrowly spatulate 1 nerved sepals, persistent, in a terminal raceme, spring.
Fruit: Ellipsoid, 3 valved capsule, summer.
Roots: Fiberous, bulbous.
General: Perennial herb.
Habitat: *Chamaelirium* is found in moist woods and bogs.
Season of Availability: The roots and rootstocks are collected in the fall.
Preparation: The roots are used, fresh or dried, in a decoction. The dried root may be ground and taken in capsules, made into a tea, or used as an alcohol extract (72).
Medical Terminology: The root has been used as an anthelmintic (22, 32, 38, 51, 58). It has also been considered a diuretic (40), tonic (22, 38, 51) and a uterine tonic (72). An interesting use of *Chamaelirium luteum* is that of a spermatorrhea (68).
Related Disease Symptoms: The powdered roots were used to treat uterine problems, pain in the head, and pain in the side (36). The rootstock was used to treat intestinal worms (22, 36). Indians chewed the root to relieve coughs (36). They also chewed the root to check miscarriage (36,72). Blazing star has been used to cure impotence, as a tonic in genitourinary weakness or irritability, for the liver and kidney diseases (22). Alice Henkel reports it as being used as a 'tonic in the derangements of women' (63). History shows it's use in cases of amenorrhea, ovarian dysmenorrhea, and leucorrhea (72).
Poisonous Aspects: Large doses may cause vomiting and nausea (15, 72). Large doses are said to act as a cardiac poison (22).
Chemistry: The root contains the bitter principle *chamaelirin* (22, 58, 72).

Chelone glabra.

35. Chelone glabra.

Family: *Scrophulariaceae.*
Common names: Turtle head, balmony, snakehead.
Stem: Erect, usually branchless, up to 2m, green.
Leaves: Opposite, sessile, linear-lanceolate, sharply toothed edges, acute, green, 7 to 12 cm long.
Flower Type: White, tubular, irregular, 2 lipped, arched upper lip, 2 to 4 cm long, in a terminal spike, summer, fall.
Fruit: Small capsule, fall.
Roots: Fiberous.
General: Perennial herb.
Habitat: *Chelone glabra* is found in wet ground, along stream banks and in swamps.
Season of Availability: The leaves are harvested in the spring. The herb is gathered in the late summer thru early fall.
Preparation: In an infusion the herb is used fresh or dried. As a poultice, the fresh herb is utilized.
Medical Terminology: Balmony has been used in a tea as an anthelmintic and tonic (22, 30, 35, 36, 38, 44, 51, 68). The herb is also considered a laxative and purgative (9, 22, 32, 35, 36, 51, 58, 68).
Related Disease Symptons: The tea is used in consumption, dysepsia, debility and jaundice, and in diseases of the liver (22, 30, 35, 44, 68). To reduce inflamation, the leaves have been used as a poultice (35, 38). From the leaves, an ointment was made for inflamed tumors, irritable ulcers, inflamed breasts and piles (22, 44). The ointment has been largely used as an external application for many skin diseases (51). A tea of the leaves has been used for indigestion (27).

Chenopodium album.

36. Chenopodium album.

Family: *Chenopodiaceae.*
Common names: Pigweed, lamb's-quarters, wild spinach.
Stem: Green, erect, up to 2m, strongly ascending branches.
Leaves: Glaucous, farinose beneath, rhombic to rhombic-ovate, sinuate-dentate, green on top, whitish beneath, alternate, edible, summer.
Flower Type: Green, ball-like in paniculate spikes with white mealiness substance all over spikes, summer.
Fruit: Round, black, 1.3-1.5 mm across, summer, fall.
Roots: Taproot.
General: Annual herb, common.
Habitat: Roadsides, cultivated ground, waste places, fields.
Season of Availability: The young tops can be collected in the summer and fall. The seeds are collected in the fall.
Preparation: The young tops are eaten steamed or boiled. The seeds are ground into a flour.
Medical Terminology: The leaves are considered mildly laxative (36).
Relative Disease Symptoms: A tea of the herb has been ingested to relieve stomach pains (36).
Poisonous Aspects: *Chenopodium album* has been found to contain potentially dangerous concentrations of nitrate (33). Death due to *Chenopodium album* has not been documented, but there have been cases of livestock poisoning where *Chenopodium* was the principle suspect (33).
Biological: *Chenopodium album* contains vitamin A and C (19). The leaves are edible by steaming or boiling (18, 19, 25, 47). American Indians ground the seeds into flour for bread (18, 19, 25, 78).
Commercial: The commercial product New Zealand Spinach and pigweed are different species in the same genus.
Personal Experimentation: With all the emphasis on edible wild plants, I found many people that eat wild spinach regularly. Just cut up the young immature tops, steam or boil, and serve as you would spinach. I have eaten wild spinach since I was a boy.

Chimaphila umbellata.

37. Chimaphila umbellata.

Family: *Pyrolaceae.*
Common names: Prince's pine, pipsissewa.
Stem: Erect, green, smooth, up to 3 dm tall.
Leaves: Whorled, oblanceolate, wedged-shaped base, thick, upper shiny lustrous green, lower paler, toothed to entire, 5 to 10 cm long.
Flower Type: Pink or white, 5 concave petals, 10 stamens, from 2 to 5 flowers in a terminal corymb, summer.
Fruit: Brown capsule with many tiny seeds, fall.
Roots: Creeping underground rootstocks.
General: Perennial evergreen, grows in small groups.
Habitat: Pipsissewa is commonly found on dry sandy soils in coniferous forests and mixed pine, birch and aspen stands.
Season of Availability: The leaves can be collected in the spring, summer, or fall. The fruit is collected in late summer. The herb is preferably collected in late summer, during flowering.
Preparation: The herb is used fresh or dried in an infusion.
Medical Terminology: The fresh leaves when broken up and applied to the skin, act as vesicants and rubefacients, which is thought to be of great use in cardiac and kidney diseases, chronic rheumatism and scrofula (22, 32, 68). It is considered an astringent, tonic, and diuretic (22, 27, 30, 32, 34, 44, 63, 68). It has been used as an anodyne, diuretic, and sudorific, especially in diseases of the breast, colds, etc. (63). The berries were eaten as a stomachic (36, 63). Two grams of the dried leaf is the official prescribed dose (2, 63).
Related Disease Symptoms: The Indians used a hot tea to induce profuse perspiration in the treatment of typhus (36, 63). The Ojibwe used a tea of the herb for upset stomach (36, 63, 75). As a tea, it was used for rheumatic and nephritic conditions (36, 63). The Mohegans applied the steeped plant, as a healing agent, to blisters (63). The Menominees considered the plant a valuable remedy in female ailments (63, 74). For eye diseases, the Chippewa boiled the root and dropped the cooled tea in the eye (10). It has been used to relieve backache (40). To treat skin eruptions, the dried leaves are used in a wash (51). A tea of the herb is supposed to retard the excretion of urine (40).
Poisonous Aspects: The plant shows experimental hypoglycemic activity (40).
Biological: The herb is an ingredient in rootbeer (15, 34). The berries are edible (15, 34). The dried leaf is the official part (2, 63).

Cichorium intybus.

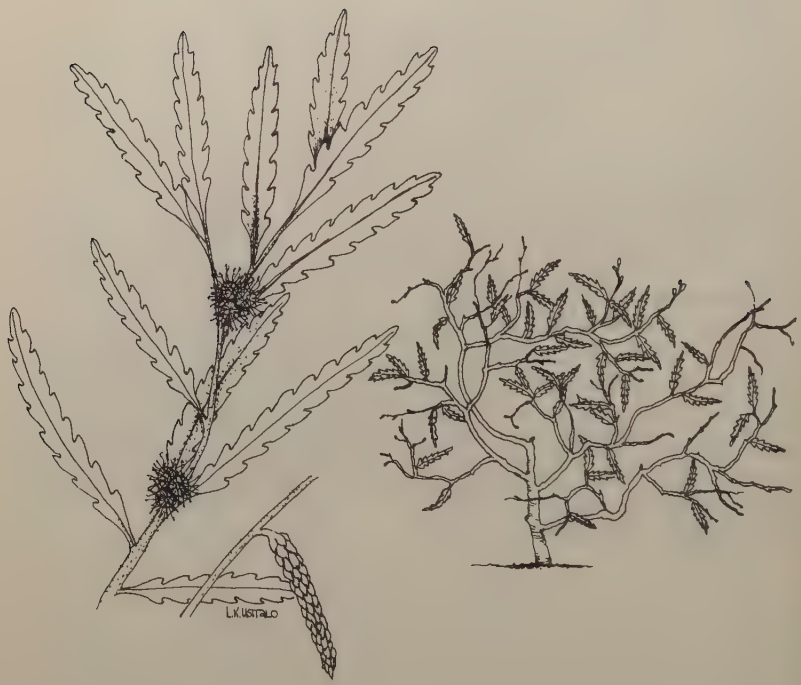
38. Cichorium intybus.

Family: *Compositae.*
Common names: Chicory, succory.
Stem: Erect, stiffly branching, milky sap, green, up to 1.2 m.
Leaves: Cauline leaves alternate, lanceolate to spatulate, pinnately cut to serrate; basal leaves in a rossete, larger, 10 to 15 cm, green, prominent main vein.
Flower Type: Blue, sessile heads of ray flowers, 2 to 5 cm across, in leaf axils, many heads to one plant, spring, summer, fall.
Fruit: Small angular achene with a parachute-like pappus, summer, fall.
Roots: Large stout taproot.
General: Perennial herb, common.
Habitat: Succory is commonly found in old open fields and along roadsides.
Season of Availability: The root is collected in the spring and the fall. The leaves are collected in the spring, while still in a rosette.
Preparation: The root is used in a decoction, usually dried. The tea is made up of one ounce of root to one pint of boiling water (68).
Medical Terminology: Medicinally, the root is a tonic, diuretic, and laxative (22, 56, 68).
Related Disease Symptoms: The root is used in a tea to increase appetite and aid digestion (32, 58). The root tea eliminates unwanted phlegm from the stomach that interferes with absorption (30, 41). It is used for upset stomach (30, 41). The tea is active in uratic acid conditions of gout, rheumatic, and joint stiffness (30, 68). Chicory is effective in disorders if the kidneys, liver, urinary canal, stomach, and spleen (35, 41). It is good for jaundice (35, 68). The French made a medicine from the plant which acted as a sedative in consumption of the lungs (41). Old herbalists considered the bruised leaves to make a good poultice for swellings, inflamations, and inflamed eyes (22).
Poisonous Aspects: It is said that if used in excess as a medicine it will bring about loss of visual power in the retina (22).
Biological: The ground roasted root is used as an adulterant of coffee and as a coffee substitute (15, 18, 22, 25, 29, 32, 34, 35, 41, 55, 58, 68, 79). The leaves are eaten as salad greens (15, 18, 22, 25, 30, 34, 55, 68, 79). Chicory is reported to produce an undesirable flavor in cow's milk (46).

Claytonia virginica.

39. Claytonia virginica.

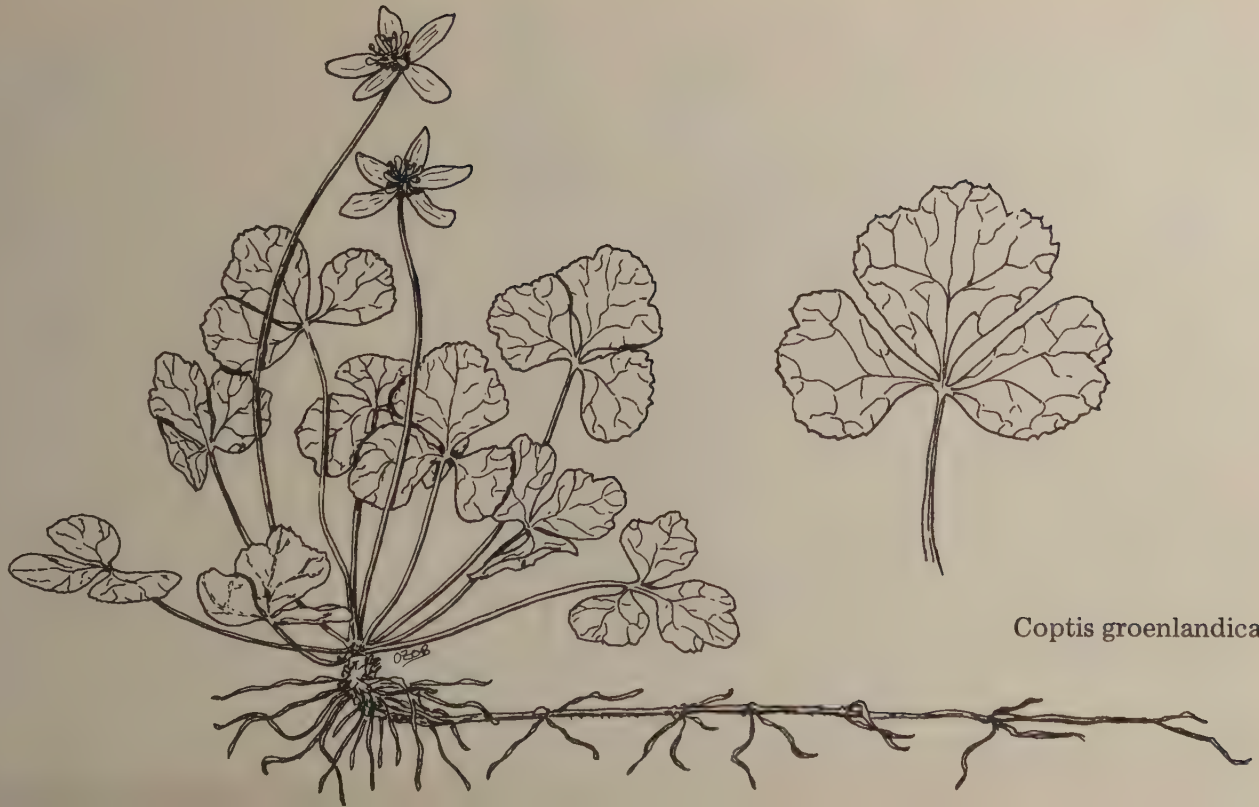
Family: *Portulacaceae.*
Common names: Spring-beauty, may-flower.
Stem: Simple, green, erect to decumbent, 20 cm tall.
Leaves: Green, 2, opposite, linear to oblanceolate, acute, 4 to 15 cm long, smooth.
Flower Type: White to pink, loose raceme, showy, 2.5 cm across, 5-19 flowers, spring.
Fruit: 1 locular, 3 valved capsule, 3-6 m round seeds, spring.
Roots: Perennial corm, up to 7 cm in diameter, edible, like potatoes, spring.
General: Perennial herb, grows in large groups.
Habitat: Hardwood forest floors, well drained sites.
Season of Availability: The tubers are collected in the spring time.
Preparation: The tubers are prepared like potatoes, for example fried, boiled, or steamed and eaten.
Biological: The tubers are edible raw or cooked (15, 18, 25, 47). The young succulent leaves may be a pot herb considering that other members of the Portulacaceae family are (15).
Commercial: Presently, there is no commercial production of any kind for *Claytonia* tubers.
Personal Experimentation: The tubers are difficult to collect. The only time it is profitable to collect them is in a large tightly grouped patch. Use a shovel and start spading the ground, shift the ground through your fingers and after some time one should be able to get a small bucket full of tubers. Eating spring beauty tubers is not a common practice. The tubers taste like potatoes.



Comptonia peregrina.

40. Comptonia peregrina.

Family: *Myricaceae.*
Common names: Sweet fern, ferngale, canadian sweet gale.
Stem: Woody, new branches villious, reddish-brown bark, up to 1.5 m.
Leaves: Alternate, deeply pinnately lobed, linear, 5 to 8 cm long, green, aromatic.
Flower Type: Monoecious or dioecious, catkins, green, spring.
Fruit: Small ellipsoid nuts, 4 or 5 mm across, summer.
Roots: Taproot.
General: Perennial deciduous shrub, grows in large groups.
Habitat: Sweet fern grows in dry sandy soil in open fields and under sparse jack pines.
Season of Availability: The leaves are collected in summer and fall. They are usually dried, but can be used fresh.
Preparation: The leaves are used in an infusion.
Medical Terminology: Medicinally, it's an astringent and tonic (32, 44, 68).
Related Disease Symptoms: To treat poison ivy rash, the tea is used as a wash (38). The tea has been used for colic (32,36). For toothache, the boiled leaves were tied to the cheek for relief (36, 63). To treat diarrhea, one pint of the tea is ingested (32, 36, 38, 44, 68).
Biological: The fruit is edible (15, 47).
Personal Experimentation: Most people do get diarrhea. I am no exception and when this happened I took the opportunity to try this tea. By drinking 4 cups of the tea within 2 hours, my case of diarrhea ceased. Many locals drink the tea for its pleasing taste.



Coptis groenlandica.

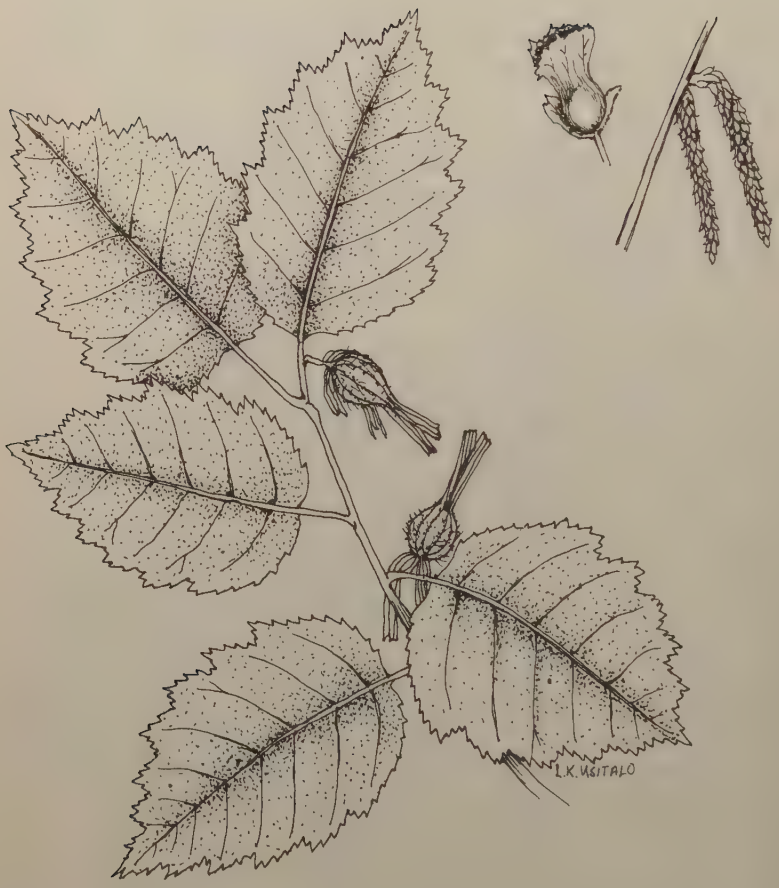
41. Coptis groenlandica.

Family: *Ranunculaceae.*
Common names: Gold thread, canker root.
Stem: Stemless.
Leaves: Basal, compound, 3 folioate shiny leaflets, each 2.5 to 5 cm wide, ovate to round, toothed, green.
Flower Type: White, 5 to 7 petals, 1 cm across, 5 to 7 petal-like sepals, 15 to 25 stamens, 3 to 9 pistils, spring.
Fruit: Small round seeds.
Roots: Golden-yellow thread-like spreading rootstocks.
General: Perennial evergreen, usually grows in small clumps.
Habitat: Gold thread grows in forests on acid soils, it is sometimes found in and around spruce bogs.
Season of Availability: Collection of the yellow root can be done in spring, summer, or fall.
Preparation: The root is chewed fresh or used in a decoction, fresh or dried.
Medical Terminology: Medicinally, it is a tonic and stomachic (47, 63). It is used as a bitters (5, 22, 30, 32, 44, 47, 63, 68).
Related Disease Symptoms: Local Indians used the golden roots for treating sore gums and lessening the pain in babies while teething (47, 54, 63, 70, 74, 75, 76). The tea is used as a mouth wash for canker sores (5, 19, 27, 30, 32, 36, 44, 63, 74, 75, 76). It was also used as a gargle for sore throat and ulcers of both the stomach and throat (27, 30, 35, 68, 70). This is hard to believe, but a tea made from gold thread and golden seal will supposedly release the driving desire for alcoholic beverages (19, 22, 30, 35, 44). The tea is used for improving digestion (19, 22, 32, 35, 36, 68). It is good for dysepsia (5, 22, 27, 36). The Montagnais Indians used the boiled tea as a wash for sore eyes, lips, and the interior of the mouth (36, 63). For inflamation of the eyes, the root tea is used as an eye wash (5).
Chemistry: A bright yellow dye can be made by boiling the yellow roots (10, 54).
Personal Experimentation: Having indigestion one day and being in an area where gold thread was handy, I dug up some roots, washed them off, and chewed them. To my amazement, my indigestion problem went away. To this day many people use the roots for teething babies and indigestion.

Corallorhiza spp.

42. Corallorhiza spp.
Corallorhiza maculata and C. odontorhiza.

Family: *Orchidaceae.*
Common names: Coral root, spotted coral root, crawley.
Stem: Erect, unbranching, reddish brown, fleshy, up to 6 dm.
Leaves: Leafless.
Flower Type: Purple to yellowish red, orchid type, spurred, drooping after pollination, 1 to 2 cm across, in a terminal raceme, summer.
Fruit: Small brown capsules, 1 to 2 cm long, summer.
Roots: Rhizome, coral shaped, reddish brown.
General: Perennial herb, rare, protected.
Habitat: Coral root is found in hardwood stands, usually on well drained sites.
Season of Availability: The stem and root are collected in the spring, summer, and fall.
Preparation: The root is used fresh or dried in an infusion or decoction.
Medical Terminology: Coral root tea is considered a diaphoretic (22, 30, 32, 36, 38, 58, 68). Some consider the root decoction sedative in action (22, 30, 36, 38, 68). It is also considered a febrifuge (22, 30).
Related Disease Symptoms: In the treatment of fevers and pleurisy, the root tea was used to bring on perspiration (35, 68). It is a powerful and effective remedy in skin diseases of all kinds; scrofula, scurvy, boils, tumors, fevers, acute erysipelas, cramps, pleurisy, night sweats, and cancer (35). Combined with blue cohosh, it was used for scanty or painful menstruation (35). The dried stalks, used in a tea, are for strengthing patients suffering from pneumonia (36).
Commercial: The root is of commercial value (37).



Corylus cornuta.

43. Corylus cornuta.

Family: *Betulaceae.*
Common names: Hazelnut, beaked hazel, filbert.
Stem: Woody, alternate branching, smooth gray bark, golden strech patterns, up to 10 m.
Leaves: Green, ovate to ovate-oblong, doubly serrate, alternate, 7-10 cm.
Flower Type: Monoecious; 8 stamens, single locular anther; short style, 2 red stigmas.
Fruit: Brown nut with green prickly husk, looking like a small bird with an open long beak, 1-4 per cluster, edible, fall.
Roots: Woody, lateral.
General: Perennial, deciduous, understory tree.
Habitat: Hardwood forests, meadows, well drained sites.
Season of Availability: The nuts are collected in the fall. One has to be quick because as soon as they are ripe the squirrels start gathering.
Preparation: The nuts can be eaten raw, roasted, or dried and ground into flour.
Biological: The nuts are edible and choice (10, 15, 25, 47, 79).
Chemistry: The Chippewa boiled the butternut and the green immature hazelnuts to make a black dye (10).
Commercial: The commercial filbert and the beaked hazel are different species in the same genus.
Personal Experimentation: When collecting the beaked hazel, it is essential to wear gloves because of the prickly husks that leave painful splinters. Once removing the husks, I've found the nuts to be bitter and prefer them roasted. I have met others that disagree. To grind the nuts into flour, first remove the husk and outer shell, roast the nuts, and grind in a flour mill or in a table grinder.

Cynoglossum officinale.

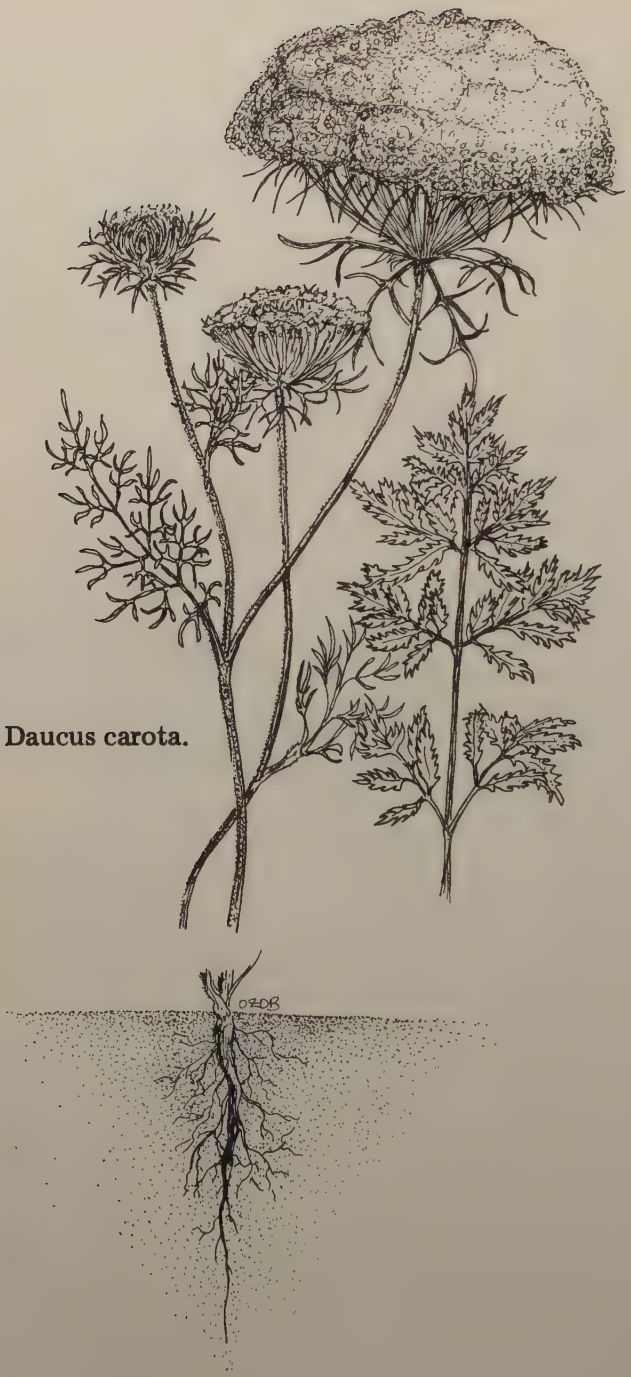
44. Cynoglossum officinale.

Family: *Boraginaceae.*
Common names: Hound's tongue.
Stem: Erect, hairy, up to 8 dm, green, branching at the top.
Leaves: First year rosette, hairy, lanceolate to spatulate, entire, petioled, 10 to 15 cm; cauline leaves sessile, lanceolate, hairy, green.
Flower Type: Reddish purple, 1 cm across, tubular with 5 rounded lobes, born terminally on a one sided raceme, spring, early summer.
Fruit: 4 nutlets, covered with recurved spines, summer, fall.
Roots: Taproot.
General: Biennial herb, common, but rarely in big patches.
Habitat: *Cynoglossum* is commonly found in open fields and along roadsides.
Season of Availability: The leaves are collected and dried in the early summer. The root is collected in the summer or fall.
Preparation: The root is used fresh or dried in a decoction. The leaves are used fresh or dried in an infusion.
Medical Terminology: Medicinally, *Cynoglossum* is an anodyne, demulcent, and astringent (30, 68).
Related Disease Symptoms: As a demulcent and mild sedative, it is of good service in bronchial catarrh, coughs, and pulmonary complaints (27). In Europe, the root was used in a decoction and as pills for coughs, colds in the head, and shortness of breath (22). The leaves were boiled in wine as a cure for dysentery (22). An ointment made from the leaves mixed with lard, was used to prevent baldness (22,68). The same ointment was used to relieve pain from burns (22, 30, 68). As a wash, the tea has been used in the treatment of piles (22, 68). The tea is considered soothing to the digestive organs (22, 68). History records its use in the treatment of coughs, colds, catarrh, diarrhea, and dysentery (30, 68).

Cypripedium calceolus.

45. Cypripedium calceolus.

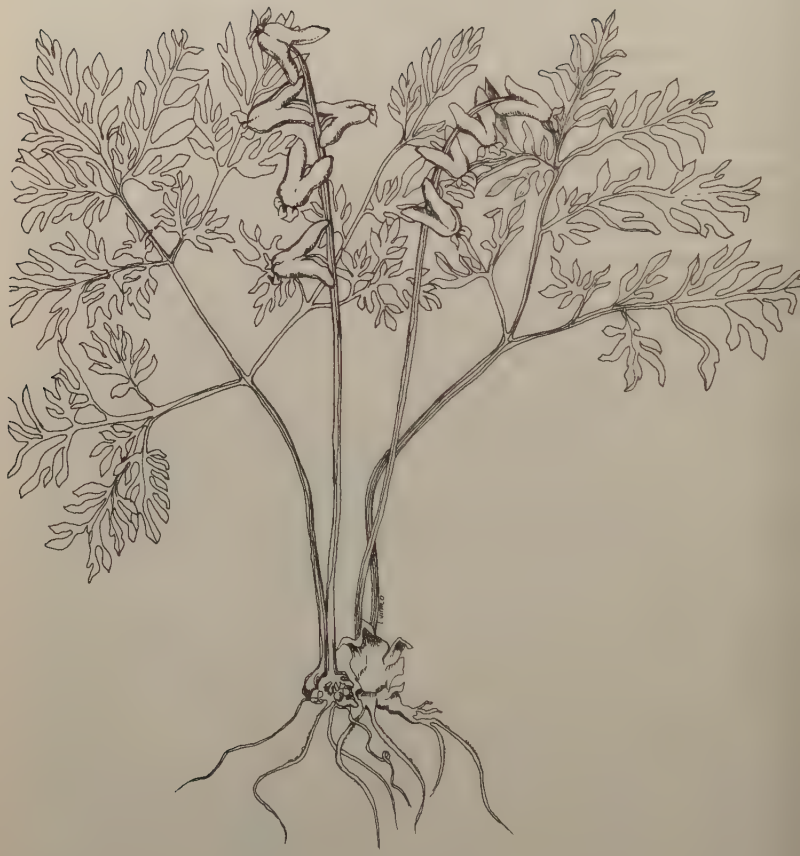
Family: *Orchidaceae.*
Common names: Lady's slipper, moccasin flower, nerve root, yellow lady's slipper.
Stem: Downy, erect, unbranched, sometimes more than one stem from the same rootstock, 15 to 70 cm tall, green.
Leaves: Alternate, 3 to 6 total, ovate to elliptic, narrowed and clasping at the base, parallel veined, distinctly ribbed, downy, up to 20 cm long, acute, green.
Flower Type: Yellow, 3 petals stripped with purple, linear spirally twisted, 1 lip sac-like yellow with purple stripes, 3 sepals, colored like the petals, 5 to 6 cm long, solitary, spring, summer.
Fruit: 1-locular 3 valved capsule, summer.
Roots: Coarsly fiberous.
General: Perennial herb.
Habitat: *C. calceolus* is found in swampy, open or shaded ground. In bogs, on wet wooded beaches and in rich woods. It is a protected flower.
Season of Availability: The roots and rhizomes are collected in the spring or the fall.
Preparation: The roots and rhizomes are used fresh or dried in a decoction. The root is powdered and made into a tea or put in capsules (68).
Medical Terminology: *Cypripedium* has been utilized as a sedative, antispasmodic, and in alleviating nervous symptoms (9, 22, 27, 30, 32, 63, 68, 72).
Related Disease Symptoms: As a home remedy the root was used for nervous conditons in women (63, 72). A decoction of the root is good for women in pain from childbirth (63, 72). Dr. Clapp cited a case of a sleepless hypocondriac who obtained no benefit from opium, but rested soundly after taking the powdered root of *Cypripedium* (63, 72). The Cherokee Indians used the root tea to dispel worms in children (63, 72). The Penobscots steeped the root for a nerve medicine (63, 72). The root tea was used for female disorders (63, 72). It allays pain, gives sleep, is useful in headache, neuralgia, and female weakness (27, 36, 68). It has been reported to be employed successfully in epilepsy, neuralgia, and other nervous diseases (32). To treat toothaches, the dried powdered root was put on decayed teeth (10).
Poisonous Aspects: *Cypripedium* has been known to cause dermatitis (46).
Commercial: The root is of commercial value (37).



Daucus carota.

46. Daucus carota.

Family: *Umbelliferae.*
Common names: Wild carrot, queen anne's lace.
Stem: Bristly, branching, 3 to 16 dm tall, green.
Leaves: First year rosette, second year alternate, pinnately decompound, leaflet segments linear, finely dissected, like a feather, green, 6 to 12 cm long.
Flower Type: White, small, grouped together in terminal umbels, single center flower is purple, summer, fall.
Fruit: Small oblong, flattened carpel, 2 to 3 mm long, summer, fall.
Roots: Taproot, white to orange.
General: Beinnial herb, common.
Habitat: Wild carrot grows in open fields and along roadsides.
Season of Availability: The root is collected in the fall. The mature seeds are collected in the fall. The herb is collected and dried in the summer, during flowering.
Preparation: In a poultice, the fresh ground or mashed roots are used. The seeds are used in an infusion.
Medical Terminology: Medicinally, it is considered a diuretic, deobstruent, and stimulant (5, 19, 32, 35, 44, 55, 58, 63, 68).
Related Disease Symptoms: A tea from the seeds and roots has been used to increase urine flow (36). The boiled mashed root is used as a curing poultice for bruises and cuts (5, 19, 32, 35, 36). The seeds have been eaten to stimulate menstruation (19, 30, 32, 35, 36, 63). The seeds have been used to treat intestinal worms (30, 36). A tea has been used in the treatment of dropsy, retention of urine, gravel, and affections of the bladder (30, 68). A decoction of the fruit has been employed in diseases of the kidneys, flatulence, colic, and dropsies (5, 19, 30). The blossoms of *D. carota*, used in a tea are utilized as a remedy for dropsy (19, 63). The seeds were used in liver disorders and jaundice (19, 27).
Poisonous Aspects: Cases of dermatitis have been associated with wild carrot (46, 54). Kingsbury reports of nervous symptoms caused by *D. carota* in horses and cattle (33).
Biological: The first year roots are edible (15, 29, 47). Milk from cows that forage on *D. carota* becomes tainted with a bitter flavor (46).
Personal Experimentation: Every summer, for years, I have eaten carrot roots in stews, soups and fresh.



Dicentra spp.

47. Dicentra spp.
Dicentra canadensis and D. cucullaria

Family: *Fumariaceae.*
Common names: Squirrel corn, dutchman's breeches.
Stem: Stemless.
Leaves: Basal, finely dissected, divisions in 3's, fern-like, green on top, silvery pubescent on the bottom, 5 to 8 cm long.
Flower Type: White, heart-shaped, 6 stamens, 1 pistil, on a scape in a terminal raceme, spring.
Fruit: Small crested seeds, spring, early summer.
Roots: Corms, bulbous.
General: Perennial herb, usually dissappearing by July.
Habitat: *D. canadensis* and *D. cucullaria* grow in rich woods, many times side by side.
Season of Availability: The yellow corms are collected in the spring or fall. If you plan to collect them in the fall you must know where they grow for there are no signs above ground.
Preparation: The bulbs are used fresh or dried in an infusion.
Medical Terminology: The bulbs are used as a tonic, diuretic, and alterative (22, 32, 36, 58, 63). The dried tubers have been considered official (2).
Related Disease Symptoms: Physicians used squirrel corn as a remedy in cutaneous diseases and as substitute for mercury in venereal diseases (36, 63). It has been used as a tonic with syphilis (22, 32). A poultice of the tubers has been used for skin diseases (36).
Poisonous Aspects: Death in livestock is recorded, though it seldom occurs because of the plants extreme distastefulness (33). The symptoms of *D. cucullaria* poisoning in cattle are trembling, nervousness, salivation vomiting, leading to the animal falling down with convulsions and pain, within a few hours complete recovery is obtained unless extreme amounts were ingested (33).

48. Epigaea repens.

Family: *Ericaceae.*
Common names: Trailing arbutus, ground laurel, mayflower.
Stem: Prostrate, trailing, reddish-brown stem, up to 10 cm in height.
Leaves: Alternate, thick, leathery, veined, rusty colored hairs on young leaves, oval to ovate, rounded at the base, petioled, 3 to 6 cm long, entire, green.
Flower Type: White to pink, tubular, 5 lobed, 5 sepals, 10 stamens, terminal or axillary clusters, 1 to 2 cm across, spring.
Fruit: 5 celled many seeded brown capsule, summer.
Roots: Fiberous.
General: Perennial, prostrate shrub, evergreen.
Habitat: *Epigaea repens* grows in sandy or boggy soil under pine or aspen.
Season of Availability: The leaves are collected during the spring.
Preparation: The leaves are used in an infusion, fresh or dried. The infusion is made by taking 1 ounce of leaves per 1 pint of boiling water (22, 68).
Medical Terminology: Medicinally, arbutus is diuretic and astringent (22, 27, 30, 68).
Related Disease Symptoms: The tea has been used in gravel, debilitated or relaxed bladder, and in urine containing blood or pus (22, 30, 68). It is used for urinary tract problems (22, 27, 30, 68).
Biological: The leaves are used as a substitute for *Arctostaphylos uva-ursi* (22, 30, 32, 58, 68). The flowers are edible (15).

Epigaea repens.

Erigeron canadensis.

49. Erigeron canadensis.

Family: *Compositae.*
Common names: Fleabane, horseweed, butterweed, horsetail fleabane.
Stem: Erect, usually branchless, downy, green, up to 1.5 m.
Leaves: Alternate, linear to oblanceolate, serrate to entire margins, 5 to 8 cm long, green.
Flower Type: White, small daisy-like ray flowers, in terminal panicles, summer, fall.
Fruit: Small, brown achene connected to a white pappus.
Roots: Taproot.
General: Annual herb, common.
Habitat: Horseweed is commonly found in fields and along roadsides.
Season of Availability: The herb is collected and dried during the fall. The root is also collected during the fall.
Preparation: The herb is used in an infusion, fresh or dried. The root is used in a decoction, fresh or dried. Indians used the plant as a steaming agent in sweat baths (63, 73).
Medical Terminology: Horseweed has the medicinal properties of a diuretic, tonic, and astringent (5, 10, 27, 32, 35, 55, 58, 63, 68).
Related Disease Symptoms: In a tea, it is used as a remedy for diarrhea and dysentery (5, 35, 36, 39, 68). The extract has been recommended for gonorrhea (5). The extract has been employed as an application to inflamed and enlarged tonsils and in inflammations and ulcerations of the throat (5, 36). For stomach pain, the Chippewa drank a tea of *E. canadensis* roots and leaves (10). For menstrual discomfort the local Indians made a tea of the herb (10, 63). The preparation is said to be useful in uterine, pulmonary, and other internal hemorrhages (32). The Ojibwa Indians made a tea to stop fever (63). The pulverized flowers were snuffed up the nostrils to cause sneezing and loosen a head cold (63).
Poisonous Aspects: *Erigeron* has been known to cause dermatitis (46).
Biological: At one time, fleabane was commonly used to keep fleas away (55).
Chemistry: *E. canadensis* contains a volatile oil that is utilized in pharmaceutical preparations (53, 55, 58).
Commercial: Fleabane is collected for commercial use in its wild state (53).

Erythronium americanum.

50. Erythronium americanum.

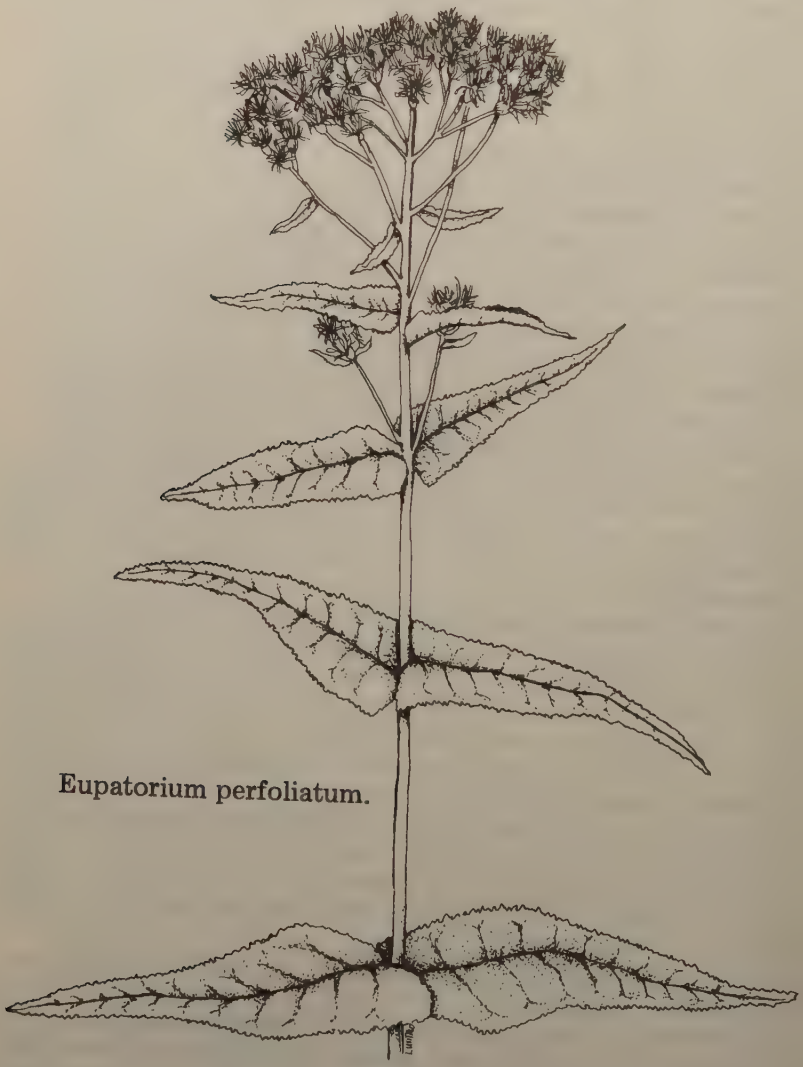
Family: *Liliaceae.*
Common names: Trout lily, dog toothed violet.
Stem: Stemless.
Leaves: Young plants have only 1 elliptic to elliptic-lanceolate mottled fleshy green leaf; mature plants have 2 leaves; both petioled, acute, mottled green, 8 to 10 cm long.
Flower Type: Yellow, solitary, on a long scape (2 to 3 dm), 2 to 4 cm across, lily-like, spring.
Fruit: 3 valved capsule, erect, spring.
Roots: Bulbous rootstock.
General: Perennial herb, gone by July, grows in groups.
Habitat: Trout lily is found in rich woods.
Season of Availability: The bulbs are collected in the spring or fall. The leaves are collected and dried in the spring.
Preparation: As a poultice, the fresh leaves and/or bulbs are used. The bulbs are used fresh or dried in a infusion.
Medical Terminology: The corm, when fresh, is an emetic (15, 32, 58, 63, 68). The root and herb were official in the U.S.P. from 1820 to 1863 as a specific for gout (63).
Related Disease Symptoms: The leaves were steeped to make an infusion for stomach distress (54). The fresh leaves are used as a poultice in scrofulous ulcers and tumors (68). It has been used in dropsy, hiccough, and vomiting (68).
Biological: The bulbs can be boiled or fried and eaten as food (15, 32, 47, 63).
Personal Experimentation: I have eaten the corms and the flowers and have never experienced any harmful effects. For salads, I found the yellow flowers to make a great addition in taste and appearance. My experience with the starchy bulb has always been in soups or fried with leeks.

51. Eupatorium perfoliatum.

Family: *Compositae.*
Common names: Boneset, thoroughwort.
Stem: 4 to 5 dm, erect, conspicuously crisp-villous, with long spreading hairs, from a stout rhizome, single, unbranching, green.
Leaves: Opposite, broad-based, strongly connate-perfoliate, tapering gradually to the acuminate tip, crenate-serrate to base, 7 to 20 cm long, 1.5 to 4.5 cm broad, pubescent above, hairy beneath.
Flower Type: Flat topped involucre, 4 to 6 mm, bracts pubescent, 9 to 22 flowers per head, white, 2.7 to 4 mm across, summer.
Fruit: Small, brown sliver-like achene.
Roots: Rhizome, netted, fiberous.
General: Perennial herb, grows in clumps.
Habitat: Moist, wet areas, stream banks, marsh.
Season of Availability: The herb is collected in the early summer while the leaves and flowers are collected in the late summer and fall.
Preparation: The herb is used fresh or dried in an infusion.
Medical Terminology: It has been considered a tonic and diaphoretic (1, 5, 9, 22, 27, 32, 44, 51, 58, 63, 68, 73). In large doses it acts as an emetic and cathartic (5, 22, 32, 40, 51, 58, 63, 68). It has been used as a laxative (22, 38, 68). It has also been used as a purgative (5, 22, 63). The Indians and early settlers considered boneset a panacea(40). The dried leaves were official with the prescribed dose of two grams (2).
Related Disease Symptoms: The American Indians used the tea to combat fevers (5, 19, 22, 27, 32, 36, 51, 54, 63, 74). The tea has been used to treat coughs and consumption (27, 36, 38). The tea has been used for rheumatism (1, 19, 22, 27, 54), arthritis and gout (63). Chiefly, it has been used for fevers (5, 32, 36), colds and flu (1, 19, 22, 27, 51, 54, 63). Creek Indian women that complained of aches and pains in the hips, boiled boneset and steamed the hip area for relief (36, 63). It has been used for dyspepsia and general debility (5, 19, 22, 32, 38, 68). In the late 1700's, it was used to treat yellow fever (63). The American Indians used it to heal broken bones (27).
Poisonous Aspects: *E. perfoliatum* has been known to cause contact dermatitis (40).
Chemistry: It contains the bitter glucoside, *eupatorin* (58). Recent experiments have shown the presence of flour sesquiterpene lactones *euperfolin*, *euperfolitin*, *eufoliatin*, and

eufoliatorin, which have cytotoxic and antitumor activity (28).

Personal Experimentation: I took one ounce of the dried leaves, poured one quart of boiling water over them and let it steep for ten minutes. I drank the quart within one hour; the taste was very bitter and I noticed a slight diuretic effect.



Eupatorium perfoliatum.

Eupatorium purpureum.

52. Eupatorium purpureum.

Family: *Compositae.*
Common names: Joe-pye weed.
Stem: 6 to 20 dm tall, speckled or evenly purple, erect, unbranching.
Leaves: Whorled, in 4's or 5's lance-elliptic, to lanceolate, gradually narrowed to the short petiole, 6 to 21 cm long, 2 to 9 cm wide, sharply serrate.
Flower Type: Flat topped, involucre 6 to 9 mm, imbricate obtuse bracts, prominate midein, flowers purple 9 to 22 per head, summer.
Fruit: Small, brown silver-like achene.
Roots: Fiberous.
General: Perennial herb, grows in clumps.
Habitat: Streams, wet areas, marsh.
Season of Availability: The rhizomes are collected in the fall. The leaves and flowering tops are collected in the summer and fall.
Preparation: Joe-pye weed is used fresh or dried. The herb is prepared in an infusion, the root in a decoction.
Medical Terminology: The roots have been mainly considered diuretic (27, 32, 51, 58, 63, 72), tonic (9, 36) and astringent (5, 18, 22, 38, 44, 68). To create profuse perspiration, Joe-pye weed was utilized for its diaphoretic properties (9, 10, 36, 63). Some considered the plant a nervine (22, 35, 68). For an aphrodisiac, the Meskwakis Indians made a root decoction (40).
Related Disease Symptoms: The Wisconsin Indians used the fresh leaves as a burn poultice and as a medicine to clear up after birth (63, 76). It has been employed for gravel in the urinary tract (22, 27, 40, 68, 72). A decoction of the roots was used for urinary disorders and infections, such as cystitis (22, 27, 32, 38, 40, 63, 68, 72, 74). It supposably relieved pains from rheumatism (22, 35, 72). The root tea was used internally for dropsy (22, 27). Chippewas used the root tea as a wash for skin inflamations (10).
Biological: Experimentally, Joe-pye weed has shown hypoglycemic activity (40).

Fagus spp.

53. Fagus spp.
Fagus grandifolia and F. americana.

Family: *Fagaceae.*
Common names: Beech.
Stem: Tree to 30 m, smooth gray bark.
Leaves: Short-petioled, ovate to oblong, densely silky when young, later glabrous above, straight veined, vein running to each tooth, 10 to 13 cm long, 4 to cm broad, sharply serrate.
Flower Type: Appearing with the leaves, staminate from the lower axils, pistillate from the upper, spring.
Fruit: Marble sized spiny capsule, containing edible nuts.
Roots: Taproot.
General: Tree, perennial, deciduous.
Habitat: Forest, mixed hardwoods throughout the Great Lakes region.
Season of Availability: The leaves are collected in the summer. The bark is collected in the spring, summer, fall, and winter.
Preparation: The leaves are used fresh or dried in a decoction. The bark is used fresh or dried in an infusion or decoction.
Medical Terminology: Theraputically, the bark and leaves are thought to be astringent (35), tonic, and antiseptic (30).
Related Disease Symptoms: Indians in this area, steeped a handful of the bark in a pint of boiling water for use 3 times a day as a wash to treat poison ivy rash (36,63). A tea was said to be used for improving the conditions of diabetes (30,35). The leafy twigs, made into a decoction, were used for pains in the lower back (27). A wash and poultice for burns, scalds and frostbite was made from a decoction of the fresh or dried leaves (36,76).
Poisonous Aspects: The pollen is a known cause of hay-fever (40).
Biological: The nuts are edible (9, 15, 29, 74, 75, 76, 79). The young expanding leaves can be eaten as a pot herb (15).

Fragaria virginiana.

54. Fragaria virginiana.

Family: *Rosaceae.*
Common names: Strawberry.
Stem: Stemless, red runners up to 3 dm.
Leaves: Petiolulate, basal, 3 leaflets per leaf, serrate, ovate to obovate, coarsely toothed, leaflets 2 to 5 cm long, 1.5 to 4 cm broad, green.
Flower Type: Up to 12 flowers on a pedicel, 5 petals, white, obovate, bracts, many pistils, many stamens, 14 to 20 mm across, spring.
Fruit: Red fruit, numerous achenes on a greatly enlarged juicy red receptacle, 1 to 3 cm thick, late spring, early summer.
Roots: Fiberous, stoloniferous.
General: Ground plant, perennial herb, grows in groups.
Habitat: Open fields and meadows, dry sites.
Season of Availability: The leaves are collected in the spring and summer. The fruit is collected in the early summer when ripe. The roots are collected in the fall.
Preparation: The leaves are dried throughly and used in an infusion. The fruits are used fresh. The roots are dried and used in a decoction.
Medical Terminology: The berries are considered refrigerant (38). The leaves have astringent properties (10, 38, 44, 52). The roots are considered diuretic (10, 36). The berries act as a dentifrice, that is, removing tarter from teeth (27,52).
Related Disease Symptoms: The fruit was used as a remedy for gout (27 36, 38). A tea of the leaves was used in the treatment of diarrhea (36, 40), dysentry and dysuria (52). For sore throat and mouth, a decoction of the root was used as a gargle (27, 52). A root tea was used by the Chippewas to treat cholera infantum (10, 75).
Biological: The fruit is edible (15, 18, 47, 54, 73, 74, 75) and sold commercially (29).
Commercial: The wild herb can be sold to drug companies (37).

Fraxinus americana.

55. *Fraxinus americana.*

Family: *Oleaceae.*
Common names: Ash, white ash.
Stem: Tree to 40 m, corrugated bark, dark, smooth on young growth.
Leaves: Opposite, pinnately compound, 5 to 9 usually 7 oblong to ovate leaflets, abruptly acuminate, crenulate to entire, paler and papillose beneath, wingless petiole, leaf scar on twigs, green.
Flower Type: In dense fascicles, short racemes or panicles, unisexual, sometimes perfect, green, spring.
Fruit: Linear to oblanceolate, 1 to 5 cm long, brown, 1 seeded samara.
Roots: Taproot.
General: Perennial tree, decidious, valuble timber tree.
Habitat: Forests, rich moist woods.
Season of Availability: The inner bark of the trunk, roots and stem is collected in the spring. The leaves are collected in the summer and fall.
Preparation: The inner bark is dried and used in an infusion. The leaves are dried and used in an infusion. The root tea has been used as an enema by the Chippewa (10).
Medical Terminology: The root bark has been used as an emmenagogue (51). It is also used as a tonic, cathartic and diuretic (38, 58). The seeds were thought to be aperient, diuretic and an aphrodisiac (36, 63).
Related Disease Symptoms: People have chewed the bark and applied the chewed material to skin sores as a healer (36, 38). It is reported that an Indian from the east coast cured cancer by the internal and external use of the fluid juice of white ash that trickled out the ends of a burning log (63). The bark was used as a treatment for hemorrhoids (40). The Meskwakis Indians cured sores and itching skin using a wash of the infused bark (40, 73). It has been reputed to be beneficial in dysmenorrhea (32, 58). Aborigines of America carried leaves of Fraxinus americana to defend themselves against rattlesnake bites (9, 38, 63).
Poisonous Aspects: The pollen is a known cause of hayfever and has caused contact dermatitis (40).
Chemistry: It contains several resins, an alkaloid and the glucoside, *fraxin* (58).
Commercial: The bark is a sellable item to some drug companies (37).

Galium aparine.

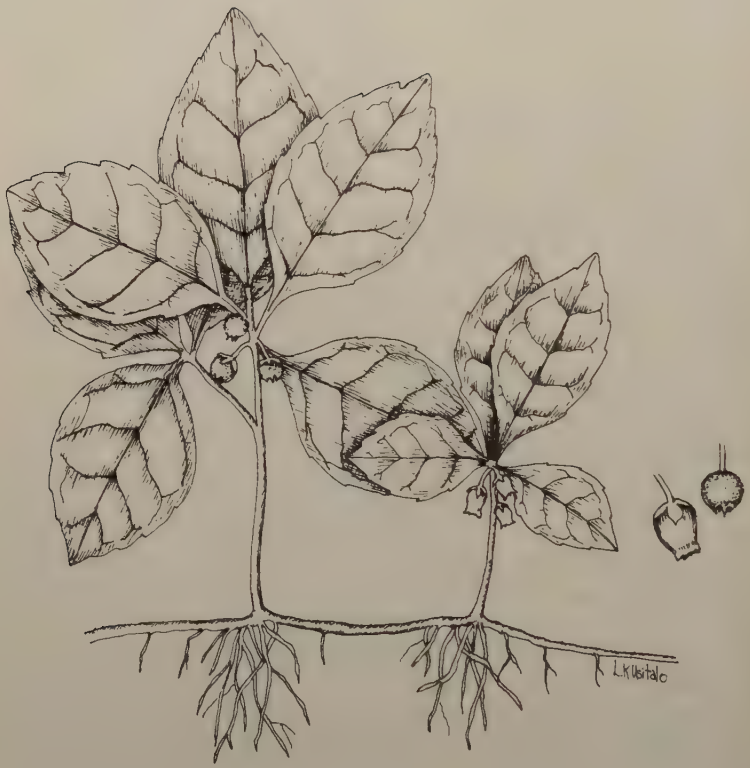
56. Galium aparine.

Family: *Rubiaceae.*
Common names: Cleavers, clivers, goose grass, bedstraw.
Stem: 1 to 10 dm, weak stems, retrorsely hooked-scabrous on the angles, seldom much branched, green, 4 angled.
Leaves: In whorls of 6 to 8, 1 nerved, cuspidate, 1 to 8 cm long, retrorsely scabro-ciliate on the margins, they have a tendency to cling to clothes, skin, anything, green.
Flower Type: 3 to 5 flowers on axillary peduncles, white, 3 to 8 mm across.
Fruit: Dry, globose carpel, uncinate-hispid, 1.5 to 5 mm in diameter.
Roots: Fiberous.
General: Annual herb, sometimes forms a dense mat.
Habitat: Wet areas, usually shaded.
Season of Availability: The herb is collected in spring and summer during flowering.
Preparation: The herb is used fresh or dried in an infusion.
Medical Terminology: The herb has been considered a diuretic (32, 44, 56, 58, 75), aperient, and alterative (19, 22, 30, 35, 38, 51, 68). It is also considered a refrigerant by some (27, 30, 35, 44, 56, 58).
Related Disease Symptoms: The herb is used as a wash in psoriasis and other skin inflamations (8, 22, 27, 30, 32, 35, 51). To ease the pain of sunburn, the cooled tea was applied with a wash cloth (19, 22, 27, 55). The tea was taken internally for urinary troubles, such as stones in the kidney or bladder (8, 19, 22, 27, 30, 32, 35, 38, 68, 75).
Biological: The plant is edible (15, 19, 25, 47, 68). The seeds can be roasted and used as a coffee substitute (15, 19, 25, 34, 55).
Chemistry: A red dye is obtained from the roots (32, 34, 39, 55). The plant contains *galitannic acid*, other organic acids and a bitter principle (58).
Personal Experimentation: I have eaten at least 200 grams of the freshly cooked plant at one sitting with no ill effects, it tastes like spinach.

57. Gaultheria procumbens.

Family: *Ericaceae.*
Common names: Wintergreen, teaberry, checkerberry.
Stem: 1 to 2 dm tall, erect from a horizontal rhizome, green to red.
Leaves: Leaves crowded near top, petioles 2 to 5 mm, blades elliptic to oblong, 2 to 5 cm long, entire to crenulate, glabrous, alternate, leathery, brittle, waxy, green.
Flower Type: White, solitary from the leaf axils on reddish drooping pedicels, urn shaped corolla, 5 sided, 5 toothed, summer.
Fruit: Red berry-like fleshy capsule, persistent, white inside, 1 to 2 cm in diameter, wintergreen flavor, fall.
Roots: Runners, fiberous.
General: Ground plant, perennial, evergreen.
Habitat: Open sandy soil, meadows, and on the floor of aspen and conifer forests.
Season of Availability: The herb is collected in the fall.
Preparation: The herb is dried or used fresh in a tincture or infusion.
Medical Terminology: The leaves are considered diuretic (44), stimulant and astringent (5, 19, 22, 51; 63, 68). It has been used as an emmenagogue (22, 27, 36, 52), but its virtues are doubtful (5). It has also been used as a galactagogue (22, 36).
Related Disease Symptoms: Internally, the tea was used as a carminative to relieve gas and colic pains (36, 38, 50). The tea has been used to ease rheumatic pains (19, 22, 27, 32, 36, 40, 52, 63, 66, 68, 70, 72, 74, 75, 76). To treat fevers, one pint of the tea was ingested within one hour (19, 52, 58, 63, 76). Headaches have been arrested by using the infusion (19, 50). The root was chewed by Indians for 6 weeks in the spring to prevent and to cure toothaches (36, 40).
Poisonous Aspects: Overdoses of the pure oil on the skin produce drowsiness, congestion and delirium (74, 75, 76).
Biological: The berries are edible (15, 25, 47, 75). *Gaultheria procumbens* has shown lectinic properties (40).
Chemistry: The plant contains the glucoside *gaultherin*, *tannin* and the crystalline principles *arbutin*, *ericolin* and *ursone* (58). It also contains *methyl salicylate* (31, 58, 59).
Commercial: The oil is used as a flavoring agent for toothpaste, gum, etc. (19, 22, 36, 38, 58, 66). Most commercial wintergreen oil production is extracted from wild plants in Pennsylvania (53). Some drug companies still purchase the plant (37).
Personal Experimentation: I have eaten a cupful of the berries at one time with no ill effects. I have made a tea by using 1

ounce of the dried leaves steeped in a quart of boiling water, let sit for two days to get the full flavor. I drank the whole quart with no ill effects.



Gaultheria procumbens.

Geranium maculatum.

58. *Geranium maculatum.*

Family: *Geraniaceae.*
Common names: Wild geranium, alum root, crane's bill.
Stem: 3 to 7 dm tall, hairy, erect, green, branched, from a rhizome.
Leaves: A few long petioled basal leaves, these, pedately cleft into 5 to 7 cuneately laciniate segments, single pair of short petioled leaves from the stem, 10 to 20 cm across, 3 to 5 lobed palmately cut, segments narrow at base.
Flower Type: Few flowered terminal corymb, pedicels and peduncles, hairy, purple, sometimes white, 5 separate ovate petals, 10 stamens, spring.
Fruit: Elongate capsules, up to 5 cm long, erect, tipped with the persistant style, summer.
Roots: Fiberous, from rhizome.
General: Perennial herb, bushy.
Habitat: Rich moist woods and meadows.
Season of Availability: The leaves and the rhizomes are collected in the spring before flowering. The rhizome can also be collected in the fall.
Preparation: The leaves are dried and used in an infusion. The rhizomes are used fresh or dried in a decoction.
Medical Terminology: Because of the rhizomes astringent qualities (10, 27, 38, 40, 51), it has been used for diarrhea (5, 9, 22, 30, 32, 36, 44, 50, 52, 63, 68, 72, 74, 75).
Related Disease Symptoms: The Indians used the decoction as a gargle to cure bleeding gums, sore mouth, sore throat or pyorrhea (5, 10, 27, 30, 32, 36, 38, 40, 44, 50, 63, 73, 75). The decoction, prepared as a douche, was used to treat leucorrhea (5, 32, 50, 63, 72). Some consider the dried powdered rhizome a styptic, that is, it arrests bleeding, such as from nose bleeds, cuts, scratches, etc. (5, 22, 27, 30, 32, 36, 38, 50, 63, 68). The root in a decoction with *(Vitis cordifolia* (grape) was used by the Cherokees to cure thrush in children (63). The Indians used a poultice of the pounded roots for piles (22, 63, 72, 73). The tea was used for birth control (50, 52).
Biological: The plant has also shown hypoglycemic activity (40). Experiments with *Geranium maculatum* showed gram + bacteria inhibition in antibiotic test (57).
Chemistry: It contains tannic and gallic acids (32, 51).
Commercial: Drug companies still purchase Geranium rhizome (37).

Geum rivale.

59. Geum rivale.

Family: *Rosaceae.*
Common names: Purple water avens, chocolate root, avens.
Stem: 3 to 6 dm, sparsely hirsutulous, green, erect.
Leaves: Basal leaves up to 3 dm, with 3 or 5 principal leaflets, compound, terminal one broadly ovate or subrotound, serrate, 3 lobed; others adjacent, narrowly obovate; cauline leaves much smaller, reduced above, variously toothed to divided, stipulate.
Flower Type: Several yellow subfused and veined with purple, about 2 cm wide, 5 petals, obcordate, constricted at the apex, contracted to a claw at the base; calyx hairy, purple, bell-shaped with 5 erect lobes and a small bract, spring, early summer.
Fruit: Achenes, spreading with decurved styles, summer, fall.
Roots: Netted, fiberous.
General: Perennial herb, grows in clumps.
Habitat: Swamps, wet meadows, wet areas.
Season of Availability: The roots are collected in the spring, summer, fall or winter.
Preparation: They are used fresh or dried in a decoction or tincture.
Medical Terminology: The root is considered astringent (63) and tonic (9, 22, 32, 51).
Related Disease Symptoms: As a gargle, the Indians used the tea to heal sore throats (63). The powdered root was used as a remedy for ague by the American Indians (9, 63). It is chiefly used to relax mucous membranes (32). The roots or herb, in a tea, have been used to treat dyspepsia (22, 36). It has been used to treat hemorrhaging (36) and diarrhea (22). The root tea was used for heart trouble (25, 34).
Biological: The root imparts a chocolate flavor when boiled (25, 34, 47).
Personal Experimentation: I have drunk more than a quart of this decoction with no ill effects. It tastes a slightly bitter, blandish chocolate flavor, with sweetner added, the flavor is much more distinctly chocolate.

Hamamelis virginiana.

60. Hamamelis virginiana.

Family: *Hamamelidaceae.*
Common names: Witch hazel.
Stem: Woody, brown-black bark, 3 to 6 m, erect, branching.
Leaves: Alternate, oval to obovate, 5 to 15 cm long, margins with many rounded teeth, broadly rounded base, green, stipulate.
Flower Type: Bright yellow petals, 1.5 to 2 cm, fall.
Fruit: Woody capsule, ovoid to ellipsoid, fall.
Roots: Taproot.
General: Bushy shrub, understory species.
Habitat: In moist woods.
Season of Availability: The bark, young twigs and leaves are collected in the fall. The bark can also be collected in the early spring.
Preparation: The bark and leaves are usually prepared in an alcohol extract, but a decoction will suffice in all applications.
Medical Terminology: The extract is used as an astringent (38, 40, 51, 66), hemostatic (1, 17, 29, 32), sedative (27) and tonic (9, 19, 22, 50, 63, 68). The official drug comes from the recently cut twigs and dried leaves which is administered in a 2 gram average dose (2).
Related Disease Symptoms: To this day it is used in lotions for bruises, sprains, burns, cuts and scratches (17, 19, 22, 27, 32, 36, 38, 50, 51, 63). Used as a wash, in suppositories or as an enema it was used to treat hemorrhoids and piles (1, 17, 19, 22, 27, 32, 36, 40, 44, 50, 51, 58, 63, 68). The decoction, taken internally, has been used to check internal bleeding, such as bleeding in the stomach, lungs, etc, (17, 19, 22, 32, 51, 58, 63, 68). The eye was washed with the decoction to treat eye inflamation, such as ophthalmia, by the American Indians (17, 22, 27, 36, 63). The Potawatomis used witch hazel in sweet baths, pouring the decoction over the hot rocks, for sore aching muscles (9, 36, 63, 76). It has been used as an injection for vaginitis (44, 50). Used as a wash, it was found beneficial for relief from insect stings or bites (19, 22, 27, 50). Topically, it was used to treat vericose veins (19, 22, 32). The decoction was used as a gargle for sore gums and mouth irritations (19, 27, 36, 44, 50).
Chemistry: Witch hazel contains tannic acid (32, 38, 58).
Commercial: Some companies are in the market for wild witch hazel from local collectors (37). Most of the U. S. commercial witch hazel production occurs in Connecticut (53).

Hedeoma pulegioides.

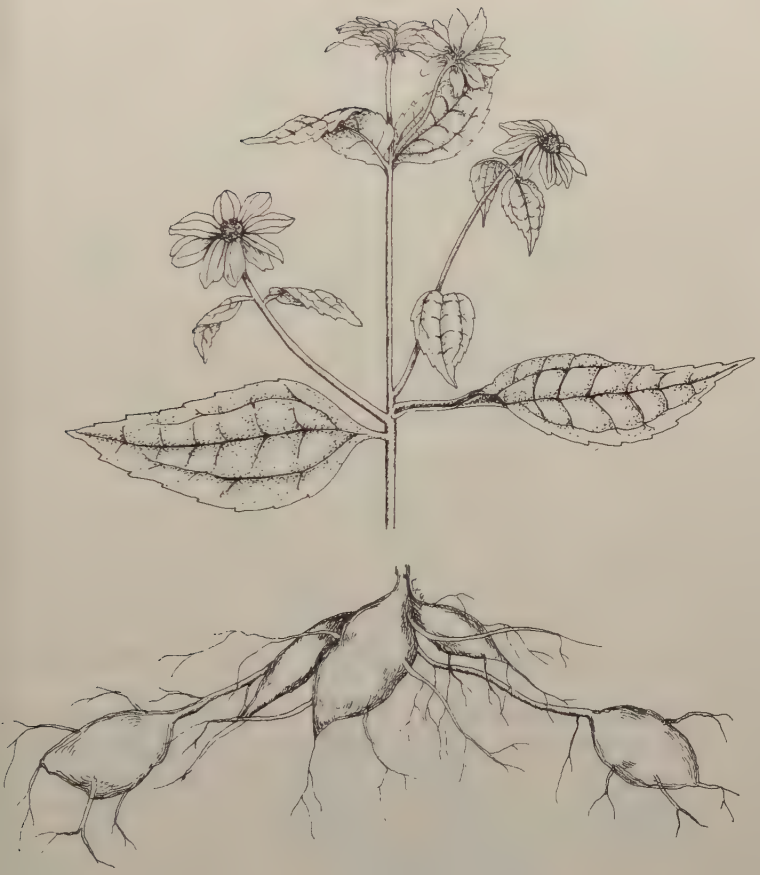
61. Hedeoma pulegioides.

Family: *Labiatae.*
Common names: American pennyroyal, mock pennyroyal.
Stem: Square, branching, green, erect, hairy, 1 to 4 dm tall.
Leaves: Opposite, petioled, lanceolate to oblong-ovate, 1 to 3 cm long, entire to serrulate, green.
Flower Type: Blue, in whorls in the leaf axils, 2 lipped, erect, tubular calyx, 2 to 5 mm long, 2 stamens, summer, fall.
Fruit: Smooth ovoid nutlets, fall.
Roots: Fiberous.
General: Perennial herb.
Habitat: Forest, dry upland sites.
Season of Availability: The whole herb is collected during the summer.
Preparation: It is used dried or fresh in an infusion.
Medical Terminology: In action, the herb is considered a stimulant (38), carminative (27, 40), emmenagogue (32, 58, 63) and diaphoretic (5, 19, 30, 35, 44). At one time the distilled oil was used directly as an emmenagogue (1).
Related Disease Symptoms: A herb tea has been used to relieve the pain of a headache (35, 40, 63). A cup of pennyroyal tea supposably will relieve upset stomach, indigestion, flatulence or nausea (5, 27, 32). The tea has been used to stimulate suppressed menstruation (5, 19, 30, 32, 35, 36). In Appalachia, the tea was used as a remedy for pneumonia (38, 63). The oil is sometimes used for its counter irritant action (29, 38). Some American Indians believed that the topical application of the herb, to pains of any limb, would take the pain away (40).
Poisonous Aspects: Pennyroyal oil can cause contact dermatitis (40). There is a report of abortion and death in livestock attributed to pennyroyal (63). There are recent reports of women using pennyroyal oil to induce abortion with lethal results (77). Overdose symptoms include nausea, dizziness, abdominal pain and sometime death (77). Pennyroyal oil can cause extensive damage to the liver (77).
Biological: The Indians utilized the plant as an effective insect repellant and remedy for ticks (19, 29, 35, 40, 63). The dried herb sewn into sachets has been used to keep away moths in drawers with woolens goods (19).
Chemistry: The herb contains *pulegone* (31) and *hedeomal* in the volatile oil (51).
Commercial: Drug companies still buy the herb from small-time collectors (37). Most of the commercial production of pennyroyal oil is from wild plants in the southern states (53).

Helianthus annuus.

62. Helianthus annus.

Family: *Compositae.*
Common names: Common sunflower.
Stem: 1 to 5 m, simple to branched, hairy, green.
Leaves: Alternate, heart shaped to elliptic-ovate, petiolate, 3 main nerves, rough, green, toothed, 12 to 25 cm long.
Flower Type: Terminal floral heads, 5 to 8 cm wide, yellow to orange ray flowers, brown to purple disk flowers, summer, fall.
Fruit: Grayish-white achene, obovate, fall.
Roots: Fiberous.
General: Annual herb, grows in large groups.
Habitat: Fields, open areas, dry sites.
Season of Availability: The seeds are collected in the fall. The flowers are gathered in the summer.
Preparation: The seeds are smashed or broken, put in cold water, where the shells are allowed to float and poured off. The seeds are then used fresh or dried, though they already are very dry. The flowers are usually used freshly picked.
Medical Terminology: The seeds are thought to be diuretic (27, 50) and expectorant (22, 32, 51, 58, 68). Johnson believes the seeds have little, if any, medicinal activity (32).
Related Disease Symptoms: In a tea, the seeds have been used for pulmonary affections, coughs an colds (22, 27, 36, 50, 51, 68).
Biological: Experimentally, *Helianthus annuus* has shown hypoglycemic activity (40). The seeds are edible (15, 18, 25, 34, 47, 50). An oil is extracted from the seeds and used for cooking (25, 29, 58).
Chemistry: A yellow dye is obtained from the flowers (22, 34, 50). A purple and black dye is obtained from the seeds (34).



Helianthus tuberosus.

63. Helianthus tuberosus.

Family: *Compositae.*
Common names: Jerusalum artichoke, sunflower.
Stem: Green, coarse, scabrous, up to 3 m, branching above.
Leaves: Green, thick, scabrous above, puberulent large midvein, petiolate, alternate, coarsly toothed, broad, up to 15 cm across.
Flower Type: Yellow, many ray flowers in a circle, black and yellow disk flowers, fall.
Fruit: Gray oval seed in a blackish-purple husk, 1-2 cm, edible, fall.
Roots: Fiberous, with large edible white tubers, fall.
General: Perennial, grows in groups.
Habitat: Fields, meadows, waste places.
Season of Availability: The potato-like tubers are collected in the fall. The seeds are also collected in the fall.
Preparation: The tubers are usually cooked by frying, boiling, or steaming and eaten, though they can be eaten raw. The tubers can be made into pickles. The seeds are crushed, put in water so the husks will float and can be poured off, the seeds will be left behind. The process is more work than it sounds and may not be worth the trouble. The seeds can be eaten raw, cooked, or ground into flour.
Biological: The tubers are edible (10, 15, 18, 25, 78). The seeds are edible (25, 78). The young flower heads can be boiled and eaten (78). The tubers seem to lack starch and can be eaten by people that are suffering ailments due to starch (78).
Commercial: Jerusalum artichoke tubers are not commercially available.
Personal Experimentation: When collecting *Helianthus tuberosus* tubers, it is a must to bring a shovel. The plants always grow in large groups and the tubers perpetuate the plant yearly. The tubers are within 1 foot of the surface. I find it easiest to spade the ground for a while, then sift the dirt by hand in search of tubers. The tubers are usually plentiful. To me, they are very similar to potatoes, so I prepare them as such.

Hepatica acutiloba.

64. Hepatica acutiloba.

Family: *Ranunculaceae.*
Common names: Liverleaf, hepatica, liverwort, sharp-lobed hepatica.
Stem: Nearly stemless, 5 to 15 cm tall.
Leaves: All basal, 3 sharp lobes, cordate at the base, 5 to 10 cm long, green, appear after flowering.
Flower Type: Purple, pink, or white, 12 to 20 mm across, 6 or 7 petal-like sepals, pointed bracts, solitary on long scapes from 5 to 15 cm, spring.
Fruit: Pointed oblong, hairy achenes, spring, summer.
Roots: Fiberous.
General: Ground floor plant, perennial herb.
Habitat: In forests with rich dry upland sites.
Season of Availability: The leaves and roots are collected in the spring.
Preparation: The roots and leaves are used dried or fresh in a tea or syrup.
Medical Terminology: The herb is thought to have astringent and tonic properties (22, 38, 44). It is also believed to have demulcent activity (22). Presently, the herb is thought to be inert of medicinal value (32, 58).
Related Disease Symptoms: The Menominees used the roots of *Hepatica* and maiden hair fern for female disorders, such as leucorrhea (63, 74). As a wash, the Meskwakis used it for deformities such as cross eyes and twisted mouth (63, 73). The roots have been used to treat coughs (36, 44, 63). Originally, the herb was thought to cure hepatic affections, thus the name liver leaf (63).
Chemistry: *H. acutiloba* contains *tannin*, mucilage and sugar (58).
Commercial: Some drug companies still purchase this herb from small time collectors (37).

Heracleum lanatum.

65. Heracleum lanatum.

Family: *Umbelliferae.*
Common names: Cow persnip, masterwort.
Stem: Stout, ridged, thick at base, 1 to 3 m, unbranched, pubescent, green, hollow stem.
Leaves: Alternate, compound, 3 palmately lobed leaflets, strongly toothed, large, each 3 to 6 dm long, green.
Flower Type: Terminal double umbel, 10 to 20 cm across, small white flowers, summer.
Fruit: Small ridged, 2 seeded carpel.
Roots: Taproot.
General: Biennial herb, grows in groups.
Habitat: Wet areas, in forests and meadows.
Season of Availability: The roots are collected in the spring, summer, fall or winter.
Preparation: The roots are used fresh or dried as a poultice or in a decoction.
Medical Terminology: Therapeutically, the root is considered a carminative, a stimulant (10, 39) and an antispasmodic (32, 35).
Related Disease Symptoms: Ojibwe Indians pounded the fresh root to a pulp and used it as a poultice on sores (63, 75). Chippewas used a root tea as a mouthwash for sore throat (10). The root was taken internally for colic and stomach cramps (35, 36, 52, 63, 73). A root decoction has been recommended for epilepsy and nervous disorders (32, 39, 40, 63, 73). The boiled root, pulped, was used in a drawing poultice for boils (10). The dried powdered roots were put on gums to relieve the discomfort caused by loose teeth (36, 60).
Poisonous Aspects: Fresh leaves and root in contact with human skin have caused irritation and inflamation (32). The leaves are a known cause of dermatitis (46, 74).
Biological: The Vancover Island Salish Indians roasted and pounded the root, mixed it with dogfish oil and used the concoction as a hair lotion to make the hair grow longer (60). The first year root is edible (34). The young sprouts are cooked and eaten as a pot herb (15).

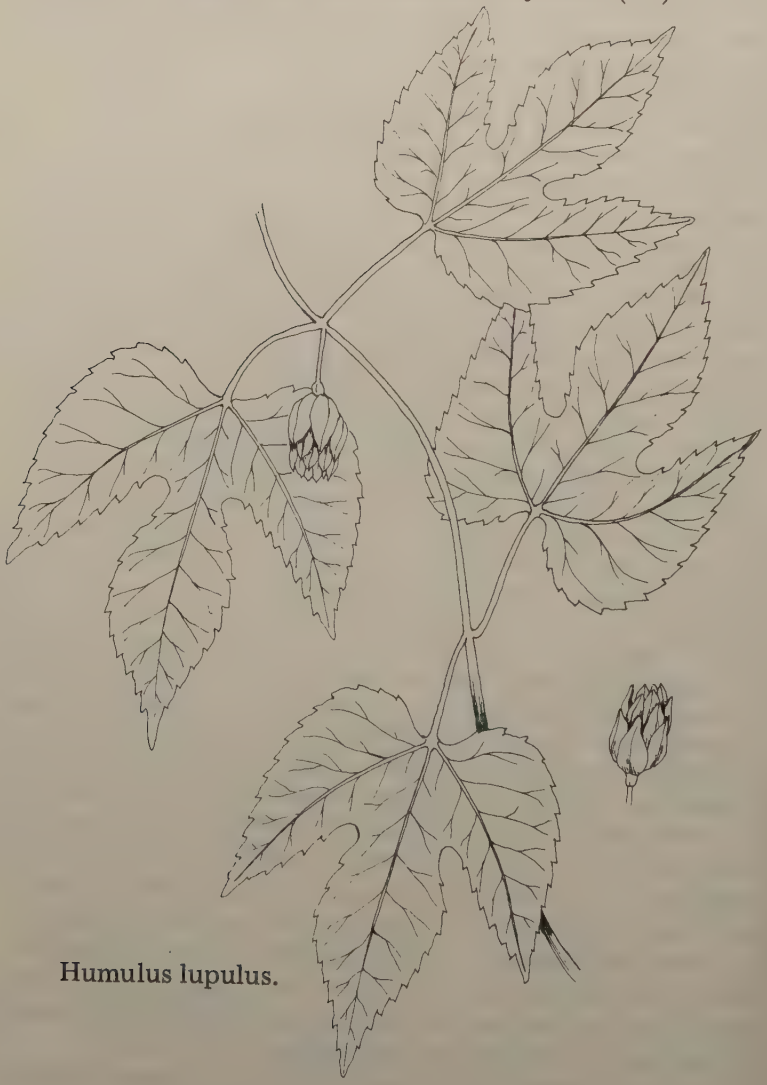
66. Humulus lupulus

Family: *Cannabinaceae.*
Common names: Hops.
Stem: Vine, 5 to 10 m, rough, green to brown.
Leaves: Opposite, petioled, 3 pointed lobes, cordate at base, upper leaves lobeless, smooth, green.
Flower Type: Dioecious; staminate flowers paniculate, numerous, 5 sepals, 5 stamens; pistillate flowers in short spikes, paired, bracts entire, 2 filaform stigmas, green, summer.
Fruit: An achene closed in a peresistant calyx, called a strobilus, cone like shape, green to brown, fall.
Roots: Taproot.
General: Perennial vine, usually carpets an area, sometimes climbing fence posts and trees.
Habitat: Open fields, roadsides, fence rows, almost any soil type.
Season of Availability: The fruiting strobili are collected in the fall.
Preparation: They are dried and used in a tincture or infusion.
Medical Terminology: Generally, it is accepted that hops have tonic (5, 40, 44, 51, 68) and sedative properties (22, 29, 30, 32, 35, 36, 58, 63, 73). Others claim it to also be an anodyne (51) and diuretic (22, 30, 35, 36, 52, 68). It is thought to have mild narcotic properties (5, 32, 51, 52). Because of its bitter qualities, it is also thought to be a stomachic (51, 63). The herb is considered a bitters (1, 22, 31). The dried strobili are official and administered in 2 gram doses (2).
Related Disease Symptoms: For insomnia, a pillow stuffed with hop blossoms or tea is used (5, 22, 30, 32, 35, 44, 50, 52, 63, 68, 73). An infusion is drunk to relieve indigestion and upset stomach (5, 22, 32, 40, 52). A heated fomentation of hops placed against the painful area was used to treat earaches and toothaches (35, 63). To relieve the stress and pain from swellings and inflamations, a fomentation of the strobili has been applies (22, 32, 36, 51). It has been used to treat the pain from rheumatism (5, 22, 36, 52). The tea has been used to reduce fever (5, 36, 50). The tea is also used for neuralgia (5, 30, 35, 52). To improve the appetite, a cup of the infusion was drunk (22, 50). Years ago, the tea was used to relieve the stress from delireum tremors (5, 22, 30, 35). Many other claims have been made for hops, but due to the validity of the sources that claim these virtues, I sincerely doubt them, so they are not mentioned.
Poisonous Aspects: The pollen is known to cause hayfever

and the plant has caused contact dermatitis (40).

Biological: The strobili and leaves are used to flavor beer (5, 15, 22, 29, 34, 50). The young shoots are edible in salads or cooked and eaten as a pot herb (11, 15, 34). In antibiotic experiments, hops have known gram + and - bacteria inhibition properties (11, 40, 57).

Chemistry: The plant contains the vasopressor agent, *quercitrin* (40). It is known to contain *lupulon* (31, 51, 58), *humulon*, *tannin* and an essential oil, about.2 to .5% by weight, which contains the compounds *humulene* and *myrcene* (11).



Humulus lupulus.

67. Hydrastis canadensis.

Family: *Ranunculaceae.*
Common names: Golden seal, yellow puccoon, yellowroot, orangeroot.
Stem: Single, unbranched, hairy, 3 to 5 dm green.
Leaves: 2 alternate palmate leaves, sharply toothed, 5 lobes, up to 25 cm across, green.
Flower Type: White, solitary, 3 petal-like sepals falling off during opening; numerous stamens, 12 to 20 pistils, spring.
Fruit: Dark red berries in a head, 2 seeds per berry.
Roots: Knotty, yellow to yellow-orange rhizome with fiberous rootlets.
General: Perennial herb, rare.
Habitat: Rich forests, maple-beech stands, hardwood sites.
Season of Availability: The root is collected in the late fall. The leaves are collected in the summer of fall after the seeds are ripe.
Preparation: The leaves are used fresh or dried. The roots are usually dried and used in a decoction, tincture or powdered.
Medical Terminology: There are many therapeutic values attributed to *Hydrastis.* The main qualities appear to be tonic (1, 9, 36, 58, 66), laxative (5, 30, 32, 35, 44, 50, 68) and stimulant (22, 63, 72). The root is also considered diuretic (5, 35, 38, 63). Others say it has antiperiodic qualities (5, 35, 51). Because of its astringent qualities (51), it is used as a hemostatic (1, 38, 40). One of its actions appears to be that of a uterine hemostatic (31, 72). The dried rhizomes and roots have been considered official (2).
Related Disease Symptoms: The root decoction has been used to treat gonorrhea (5, 63) and leucorrhea (32). The decoction of the root has been beneficially in chronic inflamations of mucous membranes (5, 29, 51, 58, 63, 66). Indians and caucasains have used the root decoction as a wash to treat eye infections and inflamations (9, 22, 27, 30, 32, 35, 38, 40, 50, 63, 72). The tincture, decoction or chewed root was used as a gargle or applied to mouth sores or ulcers, such as pyorrhea (30, 32, 35, 36, 38, 50, 63, 72). To treat catarrhal conditions, a decoction or tincture was utilized (1, 9, 29, 32, 38, 44, 50, 58). It is reputed to be useful in treating stomach and liver ailments (5, 8, 27, 40, 50, 63, 72). A cup of the tea is supposed to aid digestion (22, 36). In an enema or tea, it helped to relieve the pain of hemorrhoids (5, 22, 32). The tea is also used to treat constipation (5, 22, 44). As a wash, the decoction was used to treat skin diseases, such as acne, eczema (50, 73) and indolent ulcers (22, 30, 35, 63). As an application, *Hydrastis* was used

to treat chronic coryza, proplapsus ani and glandular swellings (32). The powdered roots were applied to cuts and wounds to promote scab formation (35, 36).

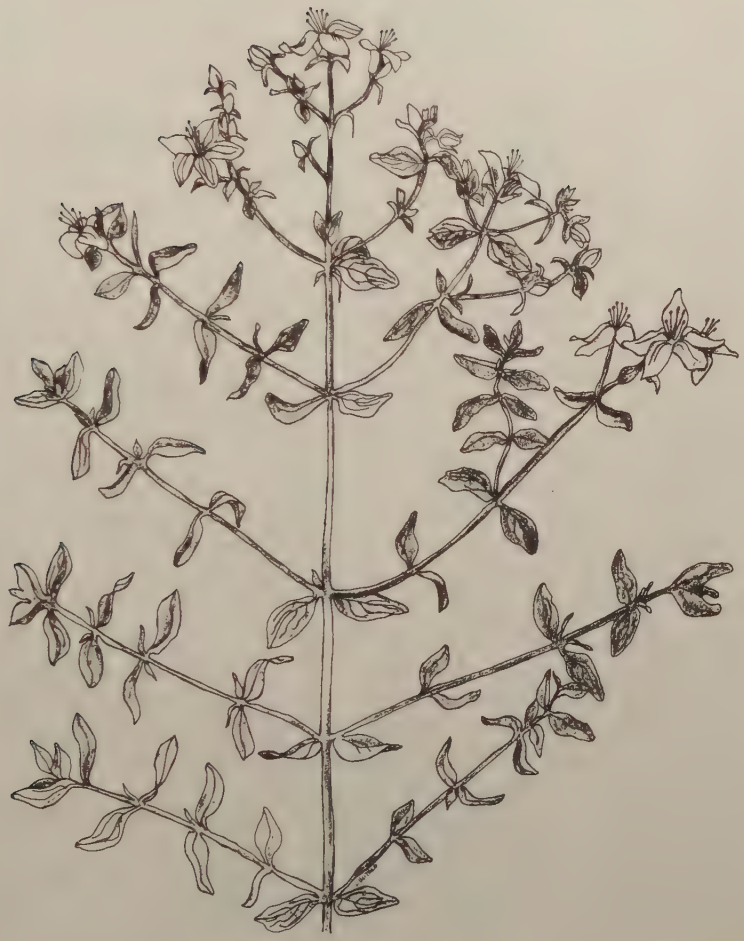
Poisonous Aspects: When eaten, *Hydrastis* produces ulcerations and catarrhal inflamations of any mucous surfaces (46).

Biological: The plant has shown hypoglycemic activity in experiments (40). The American Indians mixed the roots with bear grease and used the ointment as an insect repellant (36, 63).

Chemistry: From the roots comes a yellow dye (5, 9, 22, 27, 44, 63). *Hydrastis canadensis* contains the three alkaloids *hydrastine*, *berberine* (40) and *canadine* (1, 31, 58). Berberine has shown to have antibiotic activity (40).

Commercial: Roots are easily sold to some drug companies (37).

Hydrastis canadensis.



Hypericum perforatum.

68. *Hypericum perforatum.*

Family: *Hypericaceae.*
Common names: Saint John's wort.
Stem: Smooth, branched, up to 1 m, black spots, sometimes runners at base.
Leaves: Opposite, sessile, small, linear-oblong, minute holes that when held up to light are noticeable, 2 to 4 cm long.
Flower Type: 5 yellow oblong petals, 10 mm long; 5 sepals, 1 anceolate; numerous stamens; 1 pistil; compound cyme, summer, fall.
Fruit: Small carpels.
Roots: Fiberous, with runners, numerous, in groups, common.
General: Perrenial herb, in groups, common.
Habitat: Open fields, meadows, and dry sites.
Season of Availability: The flowering herb is collected during the summer.
Preparation: The herb can be used dried or fresh in an infusion. To make an ointment, the fresh flowers are put in olive oil and allowed to stand in the sunlight for 30 days.
Medical Terminology: Most of the literature agrees that *H. perforatum* is an astringent (22,44), diuretic (30, 35, 68) and stimulant (51).
Related Disease Symptoms: The ointment is mainly used to heal skin cuts, bruises and wounds (8, 27, 32, 35, 44, 49, 50, 58, 68). It is also used to treat insect bites (27, 44, 49). As a wash, the herb tea has been used to treat caked breasts and hardened skin (22, 30, 35). Supposably, the herb tea was useful for treating pulmonary ailments (22, 30, 40, 68).
Poisonous Aspects: Ingestion of the herb has caused photosensitization in livestock (40, 46), which has resulted in severe itching, increased heart and respiration rate, fever and diarrhea (33). Live stock death resulting from *Hypericum perforatum* ingestion has been reported (33). The leaves have caused contact dermatitis on humans (40,46).
Biological: In antibiotic experiments, *Hypericum perforatum* showed gram + and - inhibition (57).
Chemistry: The herb contains a volatile red oil and the florescent compounds *hypericin* and *hypericum* (58).

Iris versicolor.

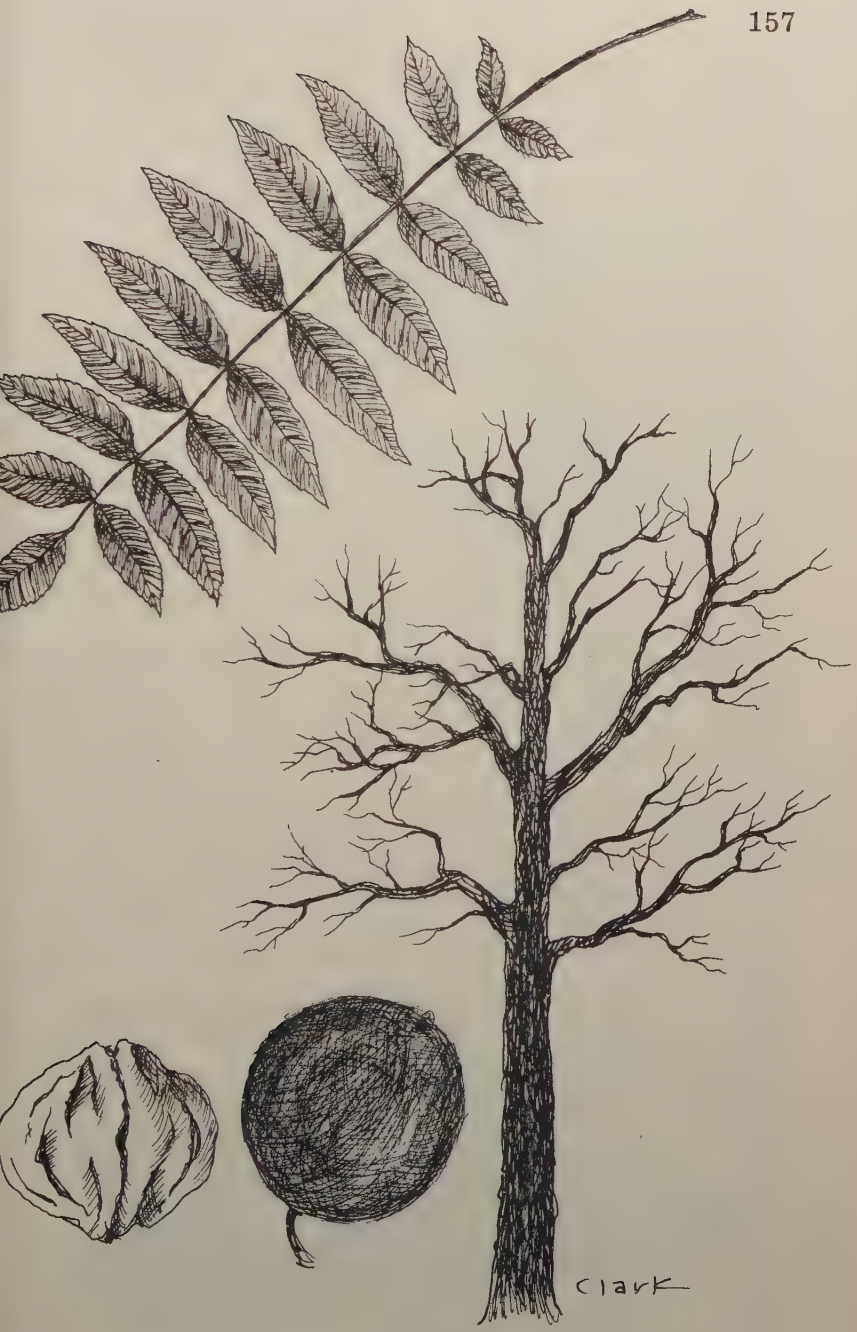
69. Iris versicolor

Family: *Iridaceae.*
Common names: Blue flag, wild iris, fleur-de-lys.
Stem: Stiff, erect, up to 1 m, smooth, green.
Leaves: Linear, parallel veined, clasping at the base of the stem, crease in the center, up to 1 m, rough, green.
Flower Type: Purple to blue, showy, 3 erect petals; 3 petal-like sepals, yellow at the base, purple veins; 8 to 15 cm across, summer.
Fruit: Green cylindric capsule, 3 valved, 10 cm long, 4 cm across, summer, fall.
Roots: Thick, fleshy rhizome, pink, produces runners.
General: Perennial, grows in clumps.
Habitat: Wet areas, marshes, slow streams, ponds.
Season of Availability: The rhizome is collected in the fall.
Preparation: They are dried and used in a tincture or decoction.
Medical Terminology: Therapeutically, iris is mainly considered a cathartic (1, 40), diuretic (5, 22, 27) and alterative (30, 32, 35, 44, 51, 58, 63, 68). Reports have said the rhizome has been used as an emetic (5, 22, 58, 63, 73, 74, 75). The rhizome is also reported to have vermifuge properties (30, 32, 35, 58). It has also been used as a sialagogue (30, 32, 35, 44). Two grams of the rhizome is the average official dose (2).
Related Disease Symptoms: The Chippewa applied the mashed root to painful swellings to quickly reduce the swelling (10). The boiled mashed root has been applied as a poultice to treat skin infections, sores and bruises (9, 22, 40, 63, 73, 76). In earlier years, the decoction was used to treat dropsy (30, 35, 63). The pulverized root mixed with water was used by the Missouri Valley Indians as an earache remedy (63).
Poisonous Aspects: Full doses of the rhizome produce violent vomiting, nausea and prostration (22, 32). The rhizomes are known to have caused dermatitis (46).
Chemistry: The root contains the acrid resinous compound, *irisin* (22, 58).
Commercial: *Iridin* is the commercial dry extract of the rhizome (1, 22).

Juglans cinerea.

70. Juglans cinerea.

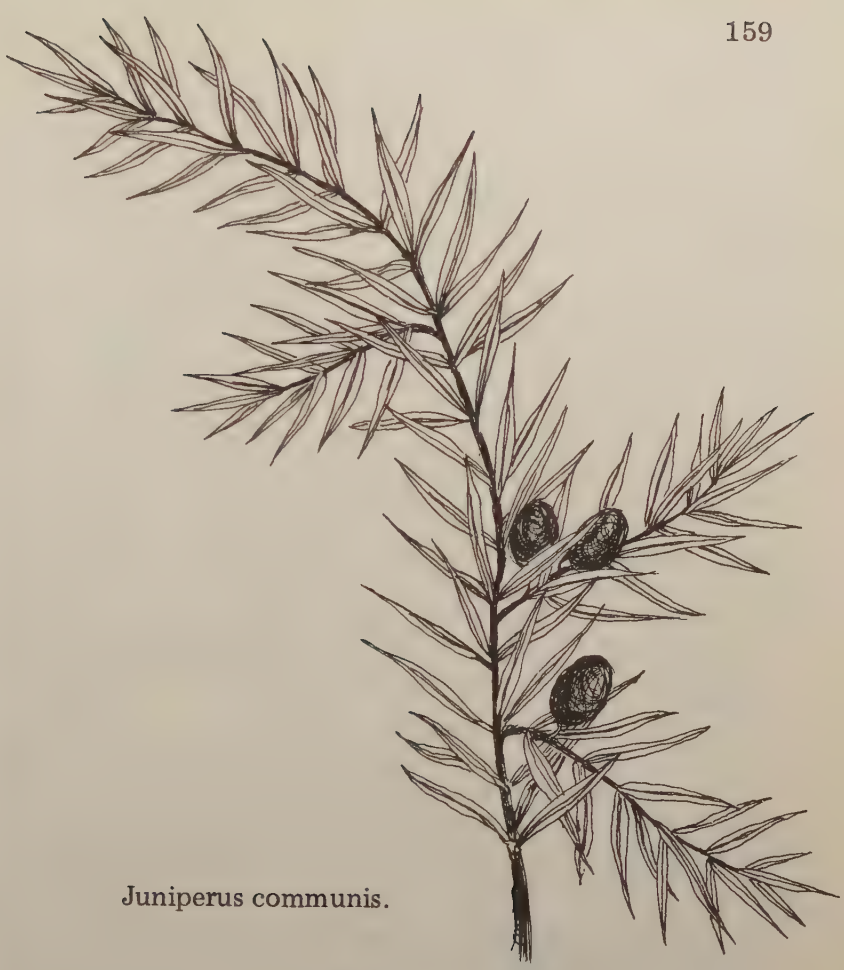
Family: *Juglandaceae.*
Common names: Butternut, white walnut.
Stem: Woody, grayish brown smoothly ridged bark, stout twigs, tree up to 30 m.
Leaves: Alternate, pinnately compound, 11 to 17 (always an odd number) oblong to lanceolate leaflets, pointed tips, main vein, green.
Flower Type: Monoecious; staminate flowers in catkins; pistilate flowers terminal on young branches, with a cup shaped involucre of bracts, green, spring.
Fruit: Green husk, later turning brown, ovoid, 4 to 8 cm, aromatic, 2 or 4 distinct ridges, a ridged shell covering an edible nut inside, fall.
Roots: Large taproot.
General: Perennial deciduous tree, fast growing, short lived, intolerant.
Habitat: Forests, along stream banks, well drained gravel soils, mostly an ornamental.
Season of Availability: The inner bark of the root is collected in the spring, summer, fall or winter. The leaves and nuts are collected in the fall.
Preparation: The inner root bark is used fresh or dried in a decoction. The leaves are used fresh or dried in an infusion or decoction.
Medical Terminology: Mainly, butternut is used for its cathartic (5, 36, 38, 44, 51, 63, 73) and vermifuge properties (22, 30, 68). The bark is reputed to have rubefacient properties (5, 38).
Related Disease Symptoms: The decoction of the root bark was taken internally to get rid of tapeworms (22, 30, 36, 38). As a wash, the decoction was used to treat fungal infections, maculae and other skin affections (30, 36, 38, 63). The tea has been ingested to treat dysentery (63) and diarrhea (27, 30). For constipation, the tea has been used beneficially (5, 32, 51).
Poisonous Aspects: The pollen is a known cause of hayfever (40).
Biological: The nuts are edible (9, 15, 25, 29, 75). In the spring, the sap has been tapped for a sweet syrup (15, 25, 29, 74).
Chemistry: The husks of the fruit are boiled in water and used to dye cloth brown (5, 22, 29, 75).
Commercial: The inner bark can still be sold commercially (37).



Juglans nigra.

71. Juglans nigra.

Family: *Juglandaceae.*
Common names: Black walnut.
Stem: Woody tree, black bark with rough ridges, up to 40 m, stout twigs.
Leaves: Alternate, pinnately compound, 11 to 23 (always odd number) oblong to ovate leaflets, acuminate, green.
Flower Type: Monoecious; staminate flowers in catkins; pistilate flowers terminal on young twigs, cup shaped involucre of bracts; green, spring.
Fruit: Green husks, later turning brown, subglobose, 5 to 8 cm, ridged, 2 valved, containing a ridged shell around an edible ridged nut, fall.
Roots: Large taproot.
General: Long lived, perennial deciduous tree, fast growing, reproduction depends largely upon rodents, valuble lumber.
Habitat: Forests, fertile, well drained soils.
Season of Availability: The inner bark of the root is collected in the spring or fall. The fruit is collected in the late summer or early fall. The leaves are collected in the spring, summer and fall.
Preparation: They are all prepared in a decoction or infusion.
Medical Terminology: Black walnut is used as a cathartic (36, 58, 73) and astringent (22, 38, 44, 50). It is also thought to be a vermifuge (30, 36, 50). The plant has lectinic properties (40).
Related Disease Symptoms: The decoction of the bark has been used as a gargle for sore throats, mouths, tonsils and diphtheria (30, 36, 50). The inner bark used in a wash or poultice is active against dermatomycosis, for example ringworm (40, 50). Also, as a wash for skin affections like eczema (22, 30). To rid worms, the decoction was taken internally (36).
Poisonous Aspects: The pollen is a cause of hayfever (40).
Biological: The nuts are edible (9, 15, 25, 29). The sap has been boiled to make a sugar syrup (15, 25).
Chemistry: The fresh or dried husks of the fruit can be used for a brown dye (22). It contains *ellagic acid* and *juglone*, which are used in cancer chemotherapeutic drugs (40).
Commercial: The inner bark of the root can be sold commercially (37).
Personal Experimentation: I took 50 grams of the dried husks, boiled in 2 quarts of water, strained the mixture and successfully dyed some white cloth and linen (brown).



Juniperus communis.

72. *Juniperus communis.*

Family: *Pinaceae. (Cupressaceae).*
Common names: *Juniper.*
Stem: Many branched, reddish brown scaley bark, erect, up to 10 m.
Leaves: Whorled, in 3's, scale-like, linear, 6 to 20 mm long, green with a white stripe in the center.
Flower Type: Dioecious; cones, spring.
Fruit: Green, at maturity it turns a deep bluish-black, drupe-like cone, fall.
Roots: Prostrate taproot.
General: Shrubby evergreen, perennial.
Habitat: Dry, rocky, open fields and meadows.
Season of Availability: The fruits are collected in the fall and winter. The small twigs and leaves are collected in the spring, summer, fall and winter.
Preparation: The berries are usually distilled for their oil, but can be used in an infusion. The leaves and twigs are used in an infusion. The oil is usually steam distilled from the unripe fruit (5).
Medical Terminology: Juniper is used as a diuretic (27, 38, 50, 52, 57, 63), stimulant (44, 51) and carminative (5, 22, 30, 32, 36, 58, 68), however, one of juniper oil's major contributions is that of an emmenagogue (1, 32, 36, 58, 63). In earlier years, it was thought to be a urinary antiseptic (38, 63, 76). Two grams is the average dose of the official dried ripe berries (2).
Related Disease Symptoms: The berries, eaten or in a tea have been used to cure colds (52, 70). A tea from the berries or leaves was reputed to be beneficial in kidney, bladder and urinary troubles; as stones, catarrhal deposits, leucorrhea, gonorrhea, etc. (5, 22, 27, 35, 36, 41, 50, 52, 63, 68). A cup of the tea is supposed to halt indigestion (22, 30, 35, 36, 52). As a poultice, the leaves have been used to treat wounds (36).
Poisonous Aspects: The internal consumption of the tea may produce irritation to the urinary passages (32, 44) and usually imparts a violet odor to the urine (5). Abortion may be caused in pregnant women by overdoses (34).
Chemistry: The plant contains a volatile oil; *pinene*, *caninene* and *camphor* are some of its constituents (31).
Commercial: The most common use of juniper berries is to flavoring the alcoholic beverage gin (5, 22, 29, 38, 41, 50, 51, 67). The berries can be picked and sold commercially (37).

Lactuca scariola.

73. Lactuca scariola.
Originally *Lactuca serriola.*

Family: *Compositae.*
Common names: Prickly lettuce.
Stem: Smooth, unbranched, up to 15 dm, green, often prickly, white sap.
Leaves: Alternate, clasping, twisted at the base, pinnately lobed to lobeless, prickly toothed margins, smooth, oblong to oblanceolate, 7 to 30 cm long, 1 to 10 cm wide, prickles on midrib, green.
Flower Type: Yellow flowers with an involucre, bracts, all ray flowers, often drying to blue, 10 to 15 mm across flower head.
Fruit: Gray achene with a pappus.
Roots: Taproot.
General: Biennial herb.
Habitat: Open fields.
Season of Availability: The leaves are gathered in the summer or fall. The milky sap is collected in the summer.
Preparation: The leaves are used in an infusion, fresh or dried. While collection, the milky sap can be rolled into a ball. An infusion is made from the sap.
Medical Terminology: Therapeutically, lettuce appears to mainly be sedative in action (27, 36, 58, 63, 73). Secondly, it is a diuretic (36, 38, 55, 63).
Related Disease Symptoms: A tea from the leaves was prepared by some American Indians and given to women in convalescence after childbirth to hasten the flow of milk from the mammary glands (36, 63, 73). The tea is also noted to induce sleep (19, 52). Gibbons said he noticed a marked relaxing effect from eating the young leaves (19). It has been employed in relieving pain from rheumatism, colic, coughing and to treat diarrhea (19). Also, a wash made from the herb was utilized to sooth sore and chapped skin (36).
Poisonous Aspects: Interestingly enough, large quantities ingested by cattle have proven toxic (40) to the extent of producing symptoms and lesions of pulmonary emphysema (33).
Biological: The young leaves are considered edible (15, 19, 55).
Commercial: In the 1700's, it was thought that *Lactuca* might be used as an opium substitute (19). Drug companies occasionally purchase the herb from part time collectors (37).

Leonurus cardiaca.

74. Leonurus cardiaca.

Family: *Labiatae.*
Common names: Motherwort.
Stem: Square, erect, sometimes branched, up to 2 m, short hairs, green.
Leaves: Opposite, petioled; bottom leaves palmately lobed, sharply toothed, 5 to 10 cm broad; upper leaves progressively more or less 3 lobed with the toothed margin changing to entire, green.
Flower Type: Pale pink to purple, 2 lipped tubular flower surrounded by stiff spines, in the leaf axils, 5 mm long, 4 stamens, summer, fall.
Fruit: Small nutlet, 2 to 4 mm across.
Roots: Fiberous roots.
General: Perennial herb, grows in small groups.
Habitat: Fields, shaded meadows, and waste places.
Season of Availability: The herb is collected in the summer and fall.
Preparation: It is used fresh or dried in an infusion.
Medical Terminology: The herb is used as a tonic (22, 51, 55) and stimulant (36, 58). Others believe it is also a diaphoretic (22, 32, 55, 58). And still others say it is used as a nervine and emmenagogue (22, 30, 35, 55).
Related Disease Symptoms: The herb tea has been used to reduce heart palpitations (22, 40) and as a remedy for asthma (36, 38). One or two cups of the infusion is supposed to calm nervousness and hysteria (22, 40). At one time the herb tea was recommended for amenorrhea (27, 30, 35). A cup of the tea has been used to relieve menstrual cramps. (22, 27, 30, 35, 40, 47, 55).
Poisonous Aspects: The leaves have caused dermatitis (46).
Personal Experimentation: I noticed a marked sedative effect when drinking one quart of the infusion, one ounce of the herb to one quart boiling water. The tea is extremely bitter. I asked a woman friend to drink the tea during menstruation, if cramps occured. She did and replied that it helped to relieve the cramps very well, but it was extremely bitter.

Lithospermum canescens.

75. Lithospermum canescens.

Family: *Boraginaceae.*
Common names: Hoary puccoon, Indian paint.
Stem: Erect, hairy, up to 60 cm, often several from the same rootstock, green.
Leaves: Alternate, lanceolate, sessile, 5 cm long, downy, green.
Flower Type: Yellow tubular calyx with 5 lobes, 10 to 20 mm across, in terminal leafy bracted cymes, spring.
Fruit: Smooth and shiny nutlets.
Roots: Thick red taproot.
General: Perennial herb.
Habitat: Dry open woods and fields.
Season of Availability: The whole plant is gathered in the spring and summer when in flower.
Preparation: It is dried and ground into a powder and used in a poultice or rubbed on the skin.
Related Disease Symptoms: The leaves, stems and roots were ground into a powder and rubbed on paralyzed parts of the body in hopes of reviving them (23, 24). The ground powder was moistened and used as a poultice on painful areas to relieve rheumatism (24).

76. *Lobelia inflata.*

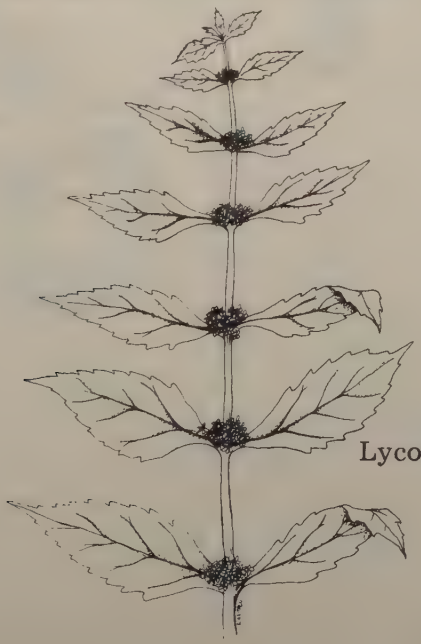
Family: *Campanulaceae.*
Common names: Indian tobacco, lobelia, wild tabacco.
Stem: Branched, hairy, up to 1 m, green.
Leaves: Alternate, sessile, ovate to oblong, serrate, 5 to 8 cm long.
Flower Type: A terminal blue to white lipped corolla, in racemes, bracts, bearded lower lip, summer, fall.
Fruit: Flowers inflate to form a seed capsule, brown, fall.
Roots: Fiberous.
General: Annual herb.
Habitat: Open woods and fields.
Season of Availability: The herb is collected in the summer when in flower.
Preparation: The herb is dried and used in a tincture, infusion or powder form.
Medical Terminology: Therapeutically, *Lobelia* is considered an expectorant (5, 22, 29, 38, 50, 56, 63, 66, 68, 72) and antispasmodic (1, 30, 35, 58). It is also considered a violent emetic (1, 9, 29, 40, 58) and diaphoretic in action (5, 30, 35, 51, 52, 63, 68). The herb is known to stimulate respiration (30, 38, 40, 63, 68, 72). The herb tea has been used as a cathartic (40, 51). The dried leaves and tops are considered official with the average dose of .1 gram (2).
Related Disease Symptoms: Many preparations of *Lobelia* are still used to treat asthma (1, 32, 36, 46, 51, 52, 58) and bronchitis (22, 27, 38, 50, 56, 68, 72). The herb has been prescribed as a remedy for laryngitis (32, 46, 58). The tea was recommended for whooping cough (36, 51). Indians used the infusion as a wash or chewed the leaves for a poultice for sore and inflamed eyes (9, 22, 63). It has been used in an ointment or wash for swellings, sprains and bruises (22, 27). *Lobeline* has been used to treat asphyxia in the new born and in accidental overdoses of anesthesia (31, 40).
Poisonous Aspects: Kloss repeatedly states that *Lobelia inflata* has no harmful effects (35). This is in conflict with others who report that overdoses of the plant are dangerous (57, 66) and result in vomiting, sweating, nausea, paralysis, depressed temperature, rapid but feeble pulse, convulsions, collapse, coma and death in human beings (5, 32, 33, 40, 46, 72). The plant is considered poisonous (33, 40, 51). The leaves of *lobelia* have caused dermatitis (46). *This plant should be used with caution* (5).
Chemistry: *Lobelia* contains the alkaloids *lobeline* and *lobelidine* (1, 46, 58). *Lobeline* has a physiological action like that of nicotine, it first excites nerves cells and then paralyzes them (1).

Commercial: *Lobeline* is used in many antitobacco therapy drugs (31, 36, 38). This plant is commercially saleable (37).

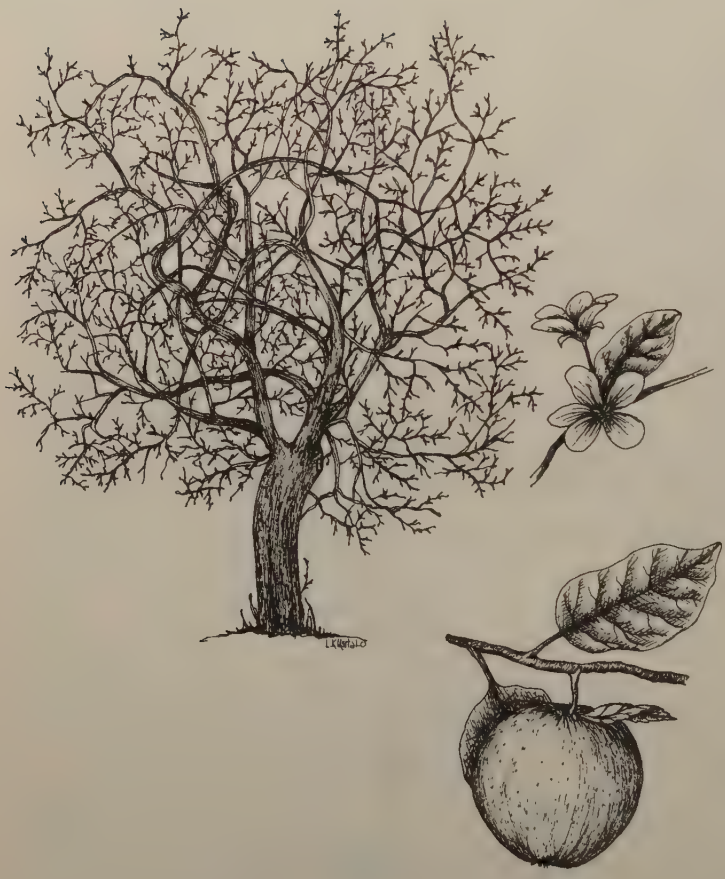
Lobelia inflata.

77. *Lycopus virginicus.*

Family: *Labiatae.*
Common names: Bugleweed, water-horehound.
Stem: Square, smooth, erect, stoloniferous, green.
Leaves: Opposite, serrate, lanceolate to lance-ovate, pointed tip, midvein, smooth, petiolate, green, 5 to 12 cm long.
Flower Type: White, tubular, with bract in leaf axils, 2 to 4 mm long, summer, fall.
Fruit: Small nutlets.
Roots: Fiberous.
General: Perennial herb.
Habitat: Wet areas.
Season of Availability: The herb is collected in the summer and fall, during flowering.
Preparation: It is used dried or fresh in an infusion.
Medical Terminology: Therapeutically, the herb has been considered sedative (36), astringent (38, 51), mildly narcotic (22, 68) and tonic (32, 44, 58). There is great skepticism as to the validity of any of these virtues (32).
Related Disease Symptoms: Its main uses appear to be in treating coughs, consumption and bleeding from the lungs (22, 27, 36, 68). It has been used to treat intermittent fever (32), and it was also used to treat diabetes (36).
Biological: The herb has experimentally shown hypoglycemic activity (40).
Commercial: Drug companies periodically purchase this herb (37).



Lycopus virginicus.



Malus spp.

78. Malus spp.

Family: *Rosaceae.*
Common names: Apple.
Stem: Woody, up to 1 m in diameter, 10-20 m tall, scaley bark, branching, erect.
Leaves: Green, ovate, serrate, acute, petiolate, 5-10 cm long.
Flower Type: White, five sepals, aromatic, 5 petals, numerous stamens, 2-5 styles, spring.
Fruit: Red, juicy, edible pome, up to 14 cm in diameter.
Roots: Large woody, lateral roots.
General: Distinct ragged shape, pioneer species.
Habitat: Meadows, old fields.
Season of Availability: The round pomes, called apples, are collected in the fall and into winter.
Preparation: Apples can be eaten raw or cooked in jelly, pies, or alone.
Poisonous Aspects: Ingestion of large quantities of apples have caused dullness, weakness, staggering, and death in livestock (33). There is a documented report of a man that died of cyanide poisoning from eating a cupful of apple seeds (33).
Biological: Apples are known to be edible raw or cooked (18, 47).
Chemistry: Apple seeds contain *cyanide* compounds (33).
Personal Experimentation: It is common among Great Lakes people to gather apples in the fall. Many people, including myself, collect wild apples for canning, pies, jellies, and eating.

Marrubium vulgare.

79. Marrubium vulgare.

Family: *Labiatae.*
Common names: Horehound.
Stem: Square, several stems from the rootstock, prostrate to suberect, whitish-green, woolly, up to 6 dm.
Leaves: Round opposite, round to ovate, crenate, wooley white hairs, soft, 2 to 6 cm long, petiolate, green, aromatic.
Flower Type: Small white tubular flowers in upper leaf axils, bracts, 4 to 6 mm long, 4 stamens, summer.
Fruit: Smooth nutlets, fall.
Roots: Fiberous.
General: Aromatic perennial herb.
Habitat: Open fields, roadsides, waste places.
Season of Availability: The leaves and stems are collected in the spring before flowering.
Preparation: The herb is dried and used in an infusion or syrup.
Medical Terminology: Horehound's action is tonic (66), expectorative (1, 38, 40, 56), laxative (34, 35, 36, 51, 52), and stimulative (5, 30, 32, 44, 58). *Marrubium* is known to produce a diaphoretic effect (5, 19, 32, 35).
Related Disease Symptoms: For coughs (50, 66) and colds (8, 19, 30, 35, 39, 40, 44), the herb is made into a cough syrup (1, 5, 18, 22, 27, 32, 36, 38). The infusion has been recommended for pulmonary consumption and affections (1, 5, 22, 30, 32, 38, 51, 68). To relieve menstrual cramps and discomfort, a cup of the tea every hour has been recommended (36, 38). Hoarhound was used to relieve asthma (22, 35, 36). A cup of the infusion was used to treat dyspepsia (27, 29, 34). A strong tea was thought to expel worms (8, 30, 34, 50, 55).
Chemistry: The herb contains the bitter principal *marrubiin* (32, 51, 58) and *tannin* (1).
Commercial: Hoarhound is used to flavor candy and throat lozenges (5, 19, 50, 66), which are used to soothe sore throat (27, 34, 35, 39, 40, 55). Collecting wild hoarhound is still profitable in the U. S. (37).
Personal Experimentation: A man from Houghton, Michigan, told me that he uses hoarhound tea every year when he feels a cold coming on. He says the tea is bitter, but it relieves "that tickling in the throat feeling" that creates the persistant cough.

Matricaria matricarioides.

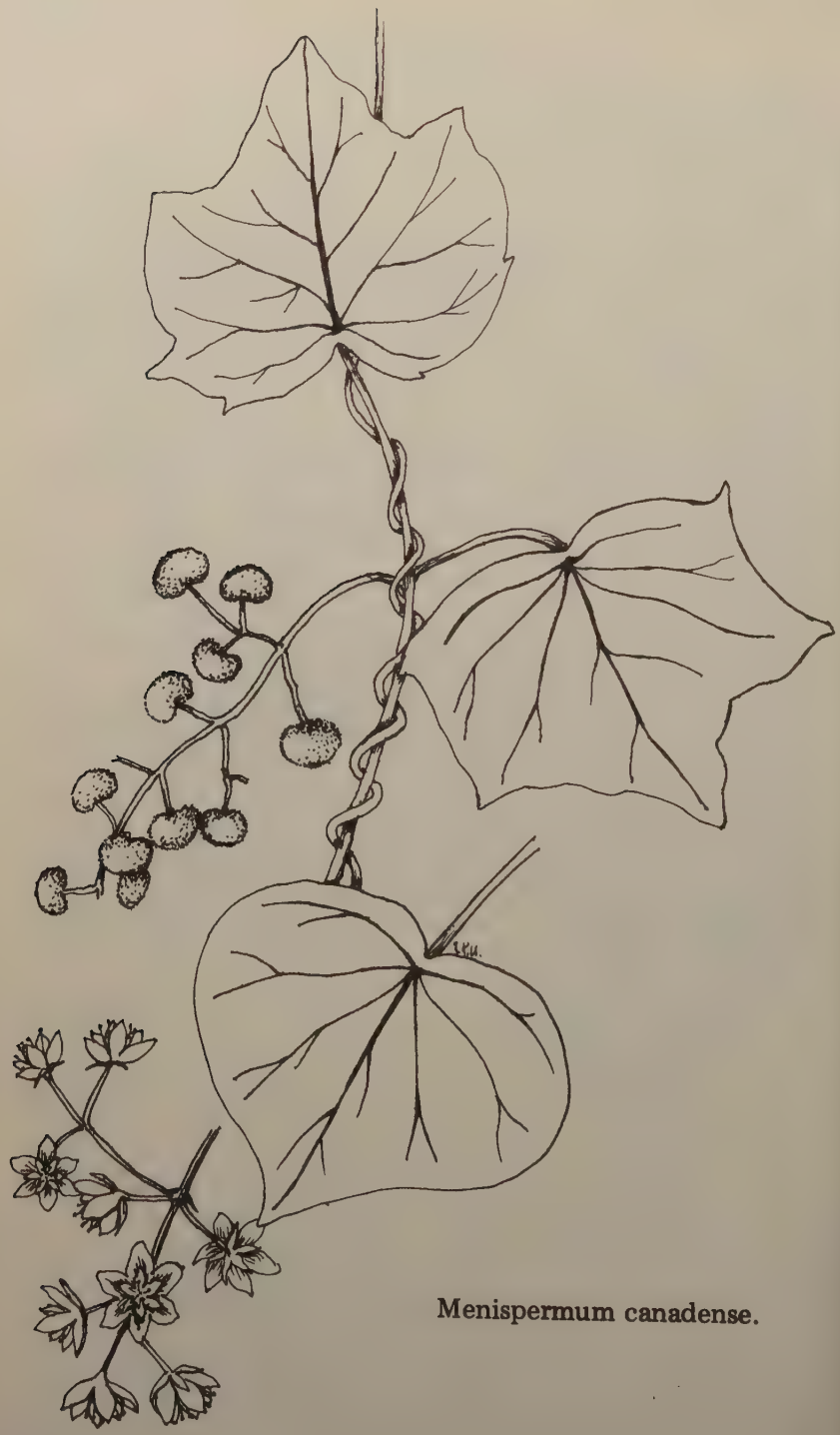
80. Matricaria matricarioides.

Family: *Compositae.*
Common names: Pineapple weed, wild chamomile.
Stem: Erect, branching, smooth, green, aromatic, 5 to 40 cm tall.
Leaves: Alternate, 2 to 3 times pinnately divided into narrow segments, 1 to 5 cm long, green, aromatic.
Flower Type: Yellow to green disk flowers in terminal heads, sometimes small white petals clinging to the outside, involucre bracts, many flower heads to a plant, summer, fall.
Fruit: Silver-like achenes, small pappus, 2 to 4 mm, summer, falls.
Roots: Small taproot.
General: Annual herb, with a pineapple scent; common.
Habitat: Hard packed ground, open fields, roadsides.
Season of Availability: The herb is collected in the summer and fall.
Preparation: To make an infusion, the herb can be used fresh or dried.
Related Disease Symptoms: The tea has been used to cure indigestion (47). Residents of the Great Lakes region use the tea as a beverage and to treat indigestion.
Biological: Cheyenne Indian women used the herb as a perfume (24).
Personal Experimentation: I took an ounce of the herb and steeped it in a quart of boiling water. The flavor is like that of German chamomile. I noticed that it soothed my stomach when I had indigestion. I have drunk the tea many times and have never noticed any harmful effects.

Medicago sativa.

81. Medicago sativa.

Family: *Leguminosae.*
Common names: Alfalfa, lucerne.
Stem: Erect to decumbent, branched, smooth, green, up to 1 m.
Leaves: Alternate, compound, 3 serrulate leaflets, oblanceolate to obovate, 1.5 to 3 cm long, stipulate, green, smooth.
Flower Type: Blue tubular flowers; erect peduncles; flowers in a head; 8 to 12 mm long; sepals 2 to 3 mm, summer, fall.
Fruit: 1 seeded pod, fall.
Roots: Fiberous.
General: Perennial herb.
Habitat: Open fields.
Season of Availability: Collection of alfalfa is done in the summer and fall.
Preparation: It can be used fresh or dried, in an infusion or ground into a powder.
Medical Terminology: *Medicago sativa* is mainly considered a nutritive (8, 30, 44).
Related Disease Symptoms: The tea has been used to increase the appetite and to increase weight (22, 50, 68).
Poisonous Aspects: Photosensitization has been reported in cattle from ingesting large quantities of alfalfa (33, 40). There have been rare reports of death in cattle (33).
Chemistry: The plant contains *vitamin K* (30, 58). It also contains some *triterpine saponins* (40).
Personal Experimentation: I have made a drink of this herb by placing the fresh plant and a small amount of water in a blender and blending for 2 minutes. I drank over a cup of the thick green liquid with 2 other friends; it had a strong taste, but was palatable.



Menispermum canadense.

82. Menispermum canadense.

Family: *Menispermaceae.*
Common names: Canada moonseed, yellow parilla.
Stem: Woody vine, climbing, brown, 2 to 4 m.
Leaves: Alternate, suborbicular, 3 to 7 shallow lobed to entire, 10 to 15 cm long, green, smooth.
Flower Type: White to greenish small flowers, 4 to 8 petals, 4 to 8 sepals, in clusters, summer.
Fruit: Bluish black drupe, 6 to 10 mm, fall.
Roots: Taproot.
General: Perennial vine, deciduous, twining.
Habitat: Forests and thickets.
Season of Availability: The rhizomes and the roots are collected in the fall.
Preparation: The roots are usually dried for storage and made into a tincture or decoction when needed.
Medical Terminology: *Menispermum* is considered diuretic (38), tonic (36, 63) and alterative in action (22, 32, 51, 58).
Related Disease Symptoms: The tincutre or decoction has been made into a lotion to treat scrofula (9), cutaneous, rheumatic, syphlitic and gouty affections of the skin (22, 32, 36, 68). A cup of the decoction was used to cure dyspepsia (22, 68). For arthritis, this root has been recommended in treatment (22, 32, 38).
Poisonous Aspects: The fruiting berry contains sharp ridged pits that can cause mechanical damage to intestines (46). There are reports of children dieing from eating the berries (33, 40).
Chemistry: The root is known to contain the toxic *isoquinolie alkaloids* (40), *berberine* and *menispine* (51, 58).
Commercial: The collected root can be sold to drug companies (37).

Mentha piperita.

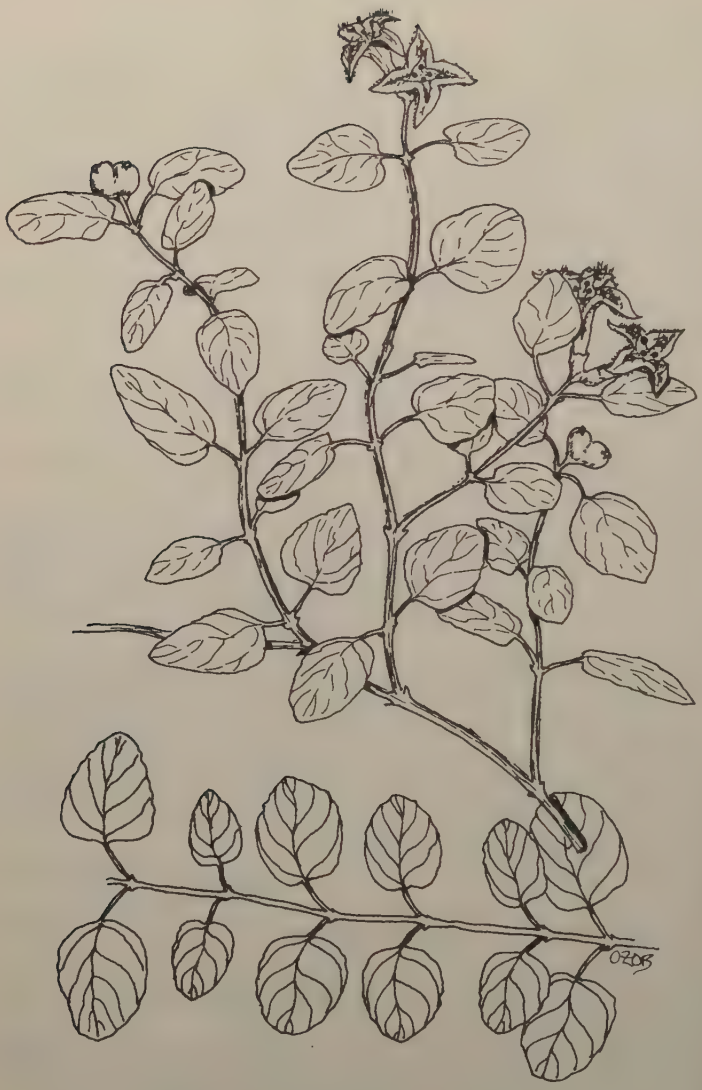
83. Mentha piperita.

Family: *Labiatae.*
Common names: Peppermint.
Stem: Square, purple, erect, smooth, branched, up to 1 m, aromatic.
Leaves: Opposite, ovate, serrate, acute, green, 3 to 6 cm, petiolate, aromatic.
Flower Type: Purple, terminal spikes, tubular, 2.5 to 4 mm, summer, fall.
Fruit: Small nutlet, 1 to 3 mm, summer, fall.
Roots: Fiberous.
General: Grows in clumps, perennial herb, mint flavor, usually propagates by the spreading roots.
Habitat: Streams and wet areas.
Season of Availability: The herb can be picked in the spring, summer or fall, though it usually has the strongest flavor during flowering.
Preparation: The infusion is made from the fresh or dried plant. The oil is obtained by steam distillation.
Medical Terminology: The oil is official in pharmaceutical preparations (59).
Related Disease Symptoms: One or two cups of tea has been a common remedy for indigestion, colic (27, 32, 36, 38, 44, 47) and nausea (5, 19, 22, 40, 44). This tea has also been ingested to cure flatulence (5, 22, 27, 44). The tea has been recommended to treat colds and flu (19, 22, 27). To cure pneumonia, equal portions of *M. piperita*, *M. arvensis* and *Nepeta cataria* were combined and made into an infusion by the Menominee (74). The herb has been prescribed for diarrhea (44) and cholera (22, 68). Fresh mint contains high amounts of *vitamins A* and *C*, the reason they were used to cure scurvy and night blindness (19). The oil of peppermint has been used in an eyewash for inflamed eyes (12). To ease muscular aches and rheumatic pains, the oil is rubbed on the body (36).
Biological: The fresh leaves are edible and are commonly used in salads (25, 47).
Commercial: Most people probably recognize peppermint as a flavoring agent in toothpaste, gum and candy (19, 31, 38, 56, 66). The dried herb is easily sold to local buyers and some drug companies (37).
Personal Experimentation: The leaves are edible (25, 47) and I have eaten them many times in salads or while just wandering in the woods. I have ingested over one quart of the infusion at one sitting and have drunk this tea at least three times a week for over a year with no harmful effects.

Mentha spicata.

84. Mentha spicata.

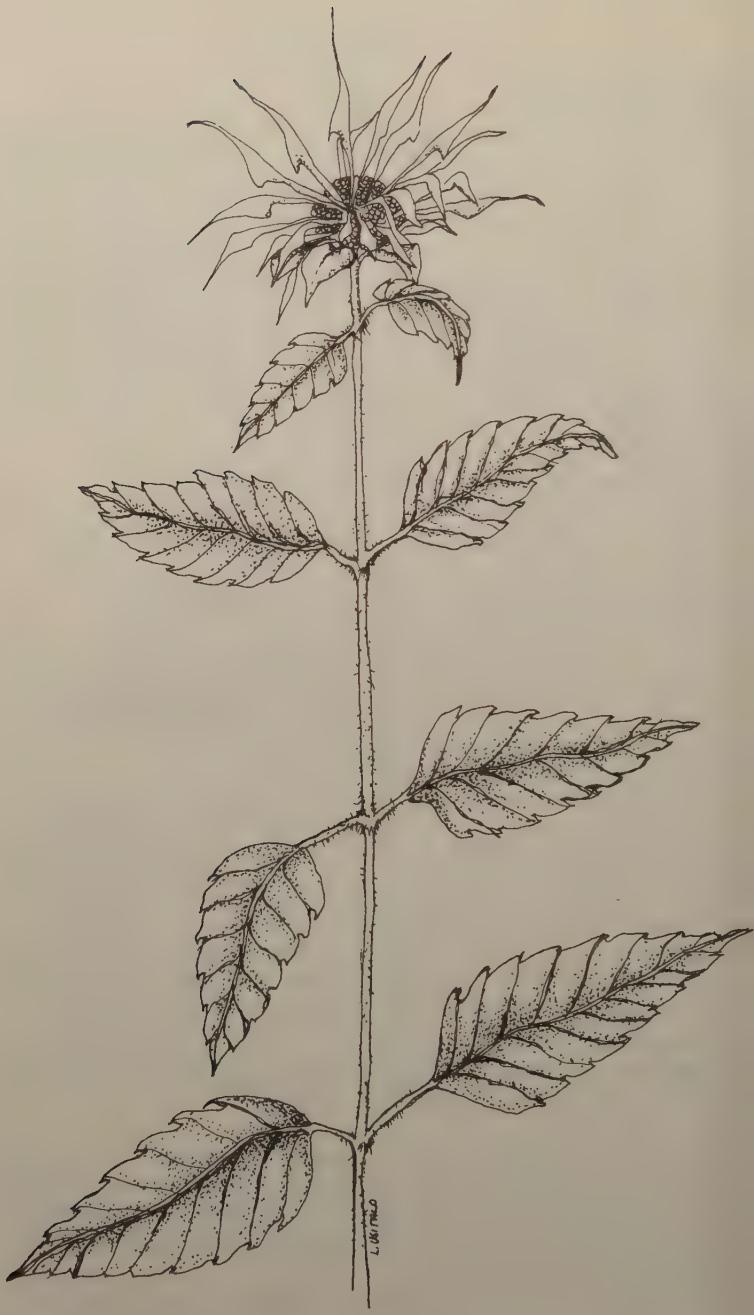
Family: *Labiatae.*
Common names: Spearmint.
Stem: Square, erect, smooth, 3 to 10 dm, green, branching.
Leaves: Opposite, ovate to elliptic, serrate, nearly sessile, 2 to 7 cm long, acute.
Flower Type: Pink to white tubular flowers in a terminal spikes, 1.5 to 2 mm long, summer, fall.
Fruit: Small nutlet, 1 to 3 mm, summer, fall.
Roots: Fiberous, spreading.
General: Grows in clumps, perennial herb, mint odor, usually propagates by the spreading roots.
Habitat: Streams and wet areas.
Season of Availability: The herb can be collected in the spring, summer and fall. The strongest flavor occurs when the plant is flowering.
Preparation: The herb, dried or fresh, is utilized in an infusion. The oil is obtained by steam distillation.
Medical Terminology: The herb's actions are carminative (27, 38, 40, 51, 56), stimulative (22, 32, 36, 68) and aromatic (5, 32, 58). It is also considered antispasmodic by some (22, 27, 51, 68). The herb and the oil have been considered official (59).
Related Disease Symptoms: Commonly, the tea is taken to relieve colic and indigestion (22, 27, 32, 36, 38, 47, 68). The tea has been used to relieve hiccough and flatulence (22). The tea as a wash or oil has been applied to hemmorrhoids to relive pain (22). To prevent vomiting, a cup of the tea was taken internally (36, 38). The tea has also been used as a topical application for skin sores (36).
Poisonous Aspects: The oil has caused contact dermatitis (40).
Biological: The fresh leaves are edible in salads or alone (22, 36, 47).
Chemistry: The volatile oil contains *carvone*, *cineole* and *limonene* (31).
Commercial: Spearmint's widest appeal is as a flavoring agent in medicine, toothpaste, gum and candy (38, 56, 66). Drug companies are still in the market for the herb (37).
Personal Experimentation: The leaves are edible (22, 36, 47) and I have eaten them many times. By taking one ounce of the dried herb, steeping it in one pint of water, I have drunk this infusion many times and up to a quart at one sitting with no ill effects.



Mitchella repens.

85. Mitchella repens.

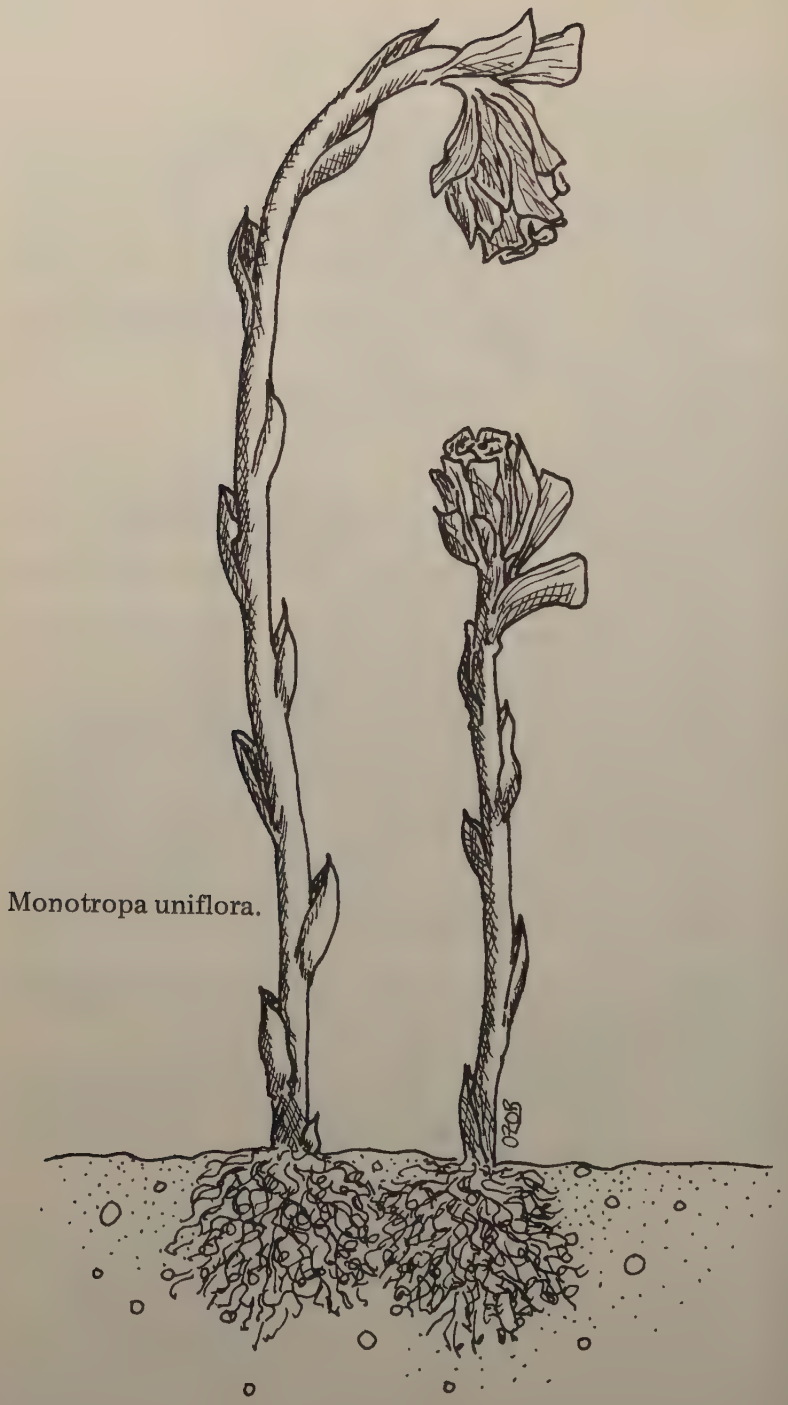
Family: *Rubjaceae.*
Common names: Partridge berry, squaw berry, squaw plum, squaw vine.
Stem: Trailing, freely branching, prostrate, rooting at the nodes, mat forming, never more than 3 dm tall, green.
Leaves: Opposite, round to broadly ovate, small stipules, 1 to 2 cm, 1 to 2 cm, petiolate, dark green.
Flower Type: White to violet, united corolla, 4 short lobes hairy within, terminal, 10 to 14 mm across, long style, 4 stigmas, spring, summer.
Fruit: Red to scarlet double berry, crowned with the caylx, fall.
Roots: Fiberous.
General: Perennial evergreen, ground cover.
Habitat: Forest floors.
Season of Availability: The herb and fruit are collected in the fall.
Preparation: The herb is used in an infusion, either fresh or dried.
Medical Terminology: The literature seems to agree that *Mitchella repens* has diuretic (44), astringent (27, 38, 51) and parturifacient properties (22, 30, 32, 58, 63, 68). It is also considered a tonic (22, 30, 44, 51). The plant was official, prescribing a 2 gram average dose (2).
Related Disease Symptoms: American Indian women drank a tea of partridge berry weeks before their parturition to render safe child birth (9, 27, 32, 36, 40, 63). The tea has been taken to cure insomnia (36, 40, 63, 70, 74). The infusion has been used to curb diarrhea and in the treatment of suppressed urine (22, 36, 68). Two ounces of the herb steeped in one pint of boiling water and mixed with cream, which has been thickened by boiling, was used as a lotion for sore nipples (22, 30).
Biological: In antibiotic experiments, partridgeberry showed gram + and – bacteria inhibition (57). The berries are edible (15).
Personal Experimentation: I drank 3 cups of the infusion that was steeped for 15 minutes. The taste was slightly bitter, yet bland. I didn't notice any effects. A friend drank over a quart of the tea at one sitting and said that he noticed a relaxing sedative effect.



Monarda fistulosa.

86. Monarda fistulosa.

Family: *Labiatae.*
Common names: Wild bergamont, wild oregano.
Stem: Square, often branching above, 5 to 15 dm tall, upper stem hirsute, green to reddish brown.
Leaves: Opposite, deltoid-lanceolate to lanceolate, serrate-dentate margins, petiolate, aromatic, 1 to 4 cm broad, bracts, green.
Flower Type: Pink, tubular, densely bearded calyx tube, 2 to 3 cm long; terminal head-like clusters, 3 to 7 cm in diameter, summer.
Fruit: Small nutlet, 1 to 3 mm, summer, fall.
Roots: Fiberous.
General: Perennial herb.
Habitat: Open woods, open fields, usually along forest borders.
Season of Availability: The herb is gathered during the summer and fall.
Preparation: Dried or fresh, it is used in an infusion. The leaves can be ground into a powder.
Medical Terminology: The main action of *Monarda* is that of a carminative (40, 44, 50, 73). Secondly, it may be considered a diaphoretic (51, 55) and diuretic (49, 50, 73).
Related Disease Symptoms: The Indians of this area used the infusion to relieve colic and pain in the stomach and intestines (36, 50, 55, 70). The Ojibwe Indians boiled the plant and inhaled the fumes to treat catarrh and bronchial ailments (9, 36, 40, 70, 74, 75). The tea has been used to treat colds (55, 73), sore throats and fever (36). The Winnebago drank the infusion for a cardiac stimulant (40). To relieve headache, the dried and powdered leaves were rubbed on the forehead (36).
Commercial: The leaves were used as a substitute for quinine (51). *Monarada fistulosa* is presently sold in Houghton, Michigan, under the trade name, wild oregano.
Personal Experimentation: A resident of Calumet, grinds the dried herb and uses it like oregano. I have drunk the infusion periodically, with no harmful effects. The taste is strong and much like that of oregano.



Monotropa uniflora.

87. Monotropa uniflora.

Family: *Pyrolaceae. (Ericaceae).*
Common names: Indian pipe, corpse-plant, convulsion-root, fits-root.
Stem: White, erect, fleshy, waxy, smooth, turns black when dried, 5 to 30 cm tall.
Leaves: Alternate, scale-like white appendages.
Flower Type: Solitary, fleshy white, nodding, bell-shaped, 10 to 17 mm, summer.
Fruit: Ovoid capsules, tiny, fall.
Roots: Fiberous.
General: Parasitic on roots or decomposing vegetable matter, perennial herb.
Habitat: Forest floors.
Season of Availability: The whole plant is collected during the summer.
Preparation: The stem and leaves are usually used fresh, but can be used dried. The root is dried and powdered.
Related Disease Symptoms: The plant was smashed, mixed with water and applied to sore and inflamed eyes as a cure (9, 36, 40, 69). To treat epilepsy and convulsions in children, the dried powdered root was administered in tea form (36). Potawatomi women drank a tea made from the roots to alleviate female troubles (76). *Monotropa* has been used to relieve pain and induce sleep (36).
Biological: Indian pipe is edible raw or cooked (15, 34).
Personal Experimentation: I have eaten the plant raw, it is very bland and tasteless.

Nasturtium officinale.

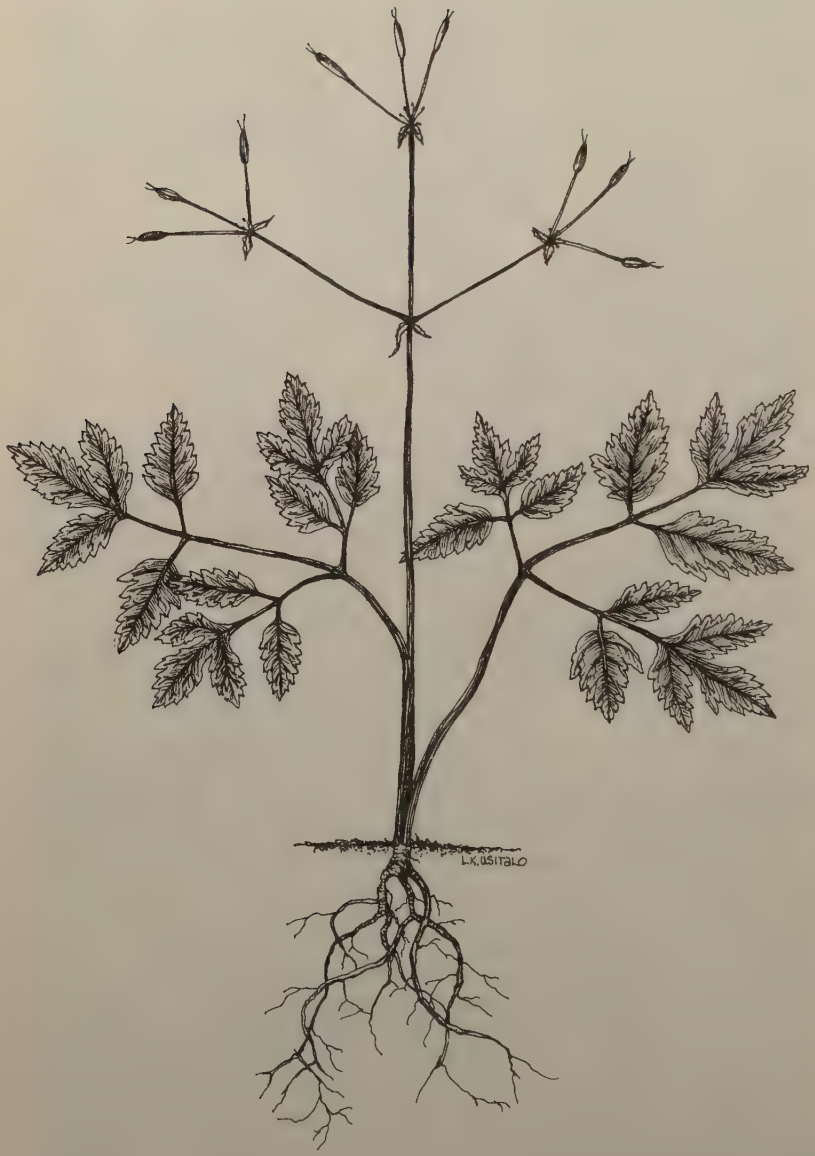
88. Nasturtium officinale.

Family: *Cruciferae.*
Common names: Watercress.
Stem: Floating, prostrate stems, freely rooting, succulent, smooth, green, mat forming.
Leaves: Alternate, pinnately compound, 3 to 11 roundish to oblong leaflets, green, entire, 15 to 25 cm long.
Flower Type: White, small, 4 petals, 2 to 5 mm, across, in racemes, spring, summer, fall.
Fruit: Slender silique, 1 to 3 cm long, on a pedicle, green, spring, summer, fall.
Roots: Fiberous.
General: Perennial herb, common.
Habitat: In slow moving streams, usually cool water.
Season of Availability: The plant can be collected in the spring, summer, fall and winter.
Preparation: The fresh plant is utilized raw in salads or cooked as a potherb.
Medical Terminology: Water cress is considered an antiscourbutic (22, 32, 58) because it is rich in *vitamin C* (27, 58) and *vitamin A* (36, 38). In Africa, water cress has been though to be an aphrodisiac (36).
Related Disease Symptoms: The herb was freshly eaten for kidney and heart ailments (38, 58). The crushed macerated plant put into cold water was a remedy for tuberculosis (22, 36, 38). The juices of the plant have been used to clear the skin of pimples and spots (22, 50). The herb is used to treat colds, asthma (36) and sore throats (48). Eating watercress in a salad promotes the appetite (22, 32).
Poisonous Aspects: Because watercress may cause an abortion, pregnant women are warned not to use it (38). Interestingly enough, another text said that Indian women ate it during labor (52).
Biological: The plant is edible and considered a great salad green (8, 18, 22, 25, 32, 34, 47).
Personal Experimentation: I have collected and eaten this plant at all times of the year. During the summer it gets to be bitter, but blanching it makes it much more palatable.

Nepeta cataria.

89. Nepeta cataria.

Family: *Labiatae.*
Common names: Catnip, catmint.
Stem: Square, erect, whitish-green, downy branched, up to 1 m.
Leaves: Opposite, round to kidney-shaped, crenate, green, whitish downy green on the bottom, petiolate, 3 to 8 cm long.
Flower Type: White with purple dots or stripes, in whorls or terminal spikes, tubular corolla, 2 lipped, 2 to 6 mm long, summer, fall.
Fruit: Small nutlet, 1 to 3 mm, summer, fall.
Roots: Fiberous.
General: Grows in small groups, perennial herb, aromatic.
Habitat: Fields, shaded fields, meadows, waste places.
Season of Availability: The herb is collected in the summer when in flower.
Preparation: The herb is used dried or fresh in an infusion. The oil is obtained by steam distillation.
Medical Terminology: Catnip is used as a carminative (27, 35, 44, 56), stimulant (51, 58) and emmenagogue (5, 10, 19, 22, 30, 38, 68). It is also considered tonic (5, 10, 39), diaphoretic (22, 51) and antispasmodic (19, 30). The dried ground leaves have been smoked as an intoxicant (40). The dried flowering tops are official (2).
Related Disease Symptoms: Catnip's main use has been to treat colic (19, 36, 55) and flatulence (8, 22, 27, 30, 44). The tea is highly recommended in infantile colic (19, 32, 40). Hot catmint tea has been used to induce sleep (18, 19, 22, 52, 55). The tea of the leaves has been used to reduce fever (10, 19, 55). For years, the tea has been used as a cold remedy (22, 30, 36, 38, 40, 55, 63). The tea is also thought to relieve nervous conditions (5, 36, 38, 55) and headaches caused by nervousness (22, 30, 35). The Menominee Indians used the tea to treat pneumonia (63, 74) (see *Mentha piperta).* Chippewa Indians mixed the leaves with *Tanacetum vulgare* leaves and used the infusion for fever (10). The tea is used to bring on delayed menstruation (5, 19, 32, 36, 38). To treat painful swellings, the leaves were crushed and applied as a poultice (22, 36, 52, 63). To relieve respiratory affections, the leaves were smoked (36, 38). The chewed leaves are said to relieve toothaches (5, 40). Another remedy applied to aching teeth was catnip leaves mixed with cloves and sassafras and applied in a poultice (40).
Chemistry: The volatile oil is about 85% *nepetalactone* (31).
Commercial: The plant is still sold commercially (37).
Personal Experimentation: I have drunk over a quart of the infusion and noticed no effects, except slight perspiration. It tastes minty with a bitter accent.



Osmorhiza longistylis.

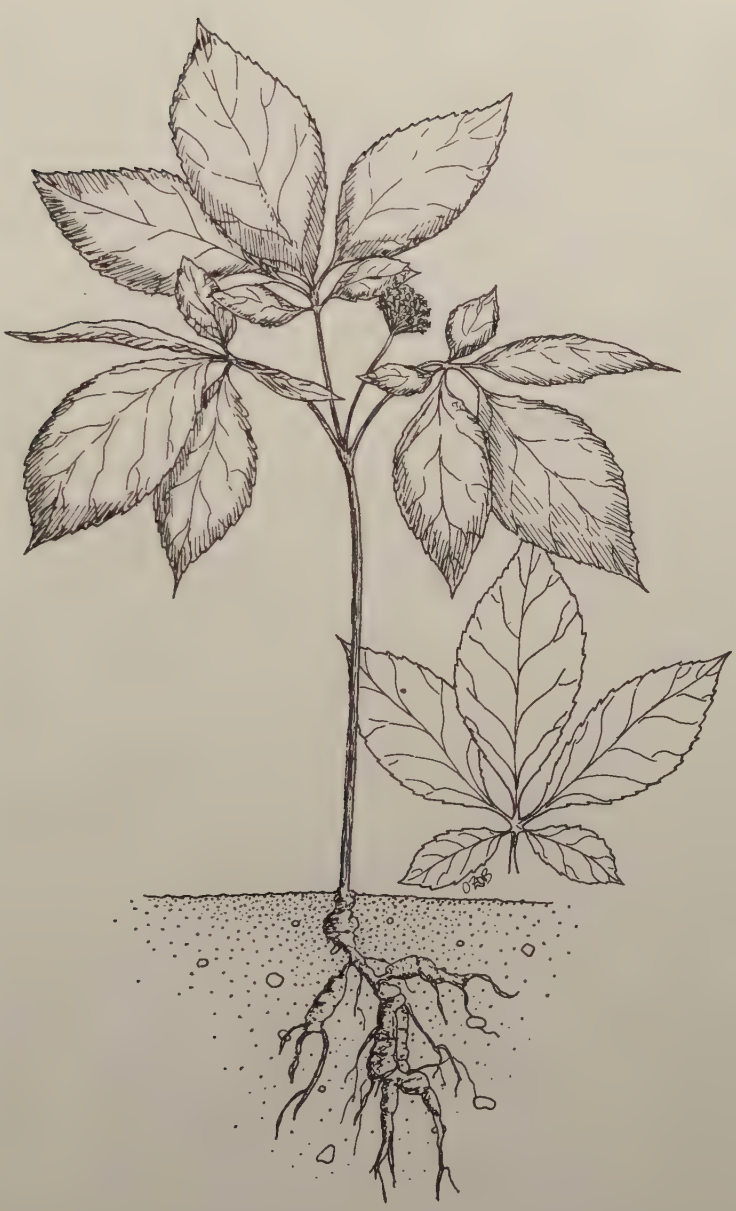
90. Osmorhiza longistylis.

Family: *Umbelliferae.*
Common names: Anise-root, sweet cicely.
Stem: Slender, smooth, erect, green, aromatic, 1 to 1.2 m tall.
Leaves: Alternate, compound, 2 to 3 times ternate, leaflets glabresent beneath, green, stipulate, 4 to 7 cm long.
Flower Type: Tiny white flowers, double umbels, above leaves, styles are longer than the petals, 1 mm across, summer.
Fruit: Ribbed carpel, cylindric, brown, 1.2 to 1.5 cm long, summer, fall.
Roots: Thick fiberous roots, anise flavor.
General: Perennial herb, aromatic.
Habitat: Rich forests.
Season of Availability: The roots are collected during the summer and fall.
Preparation: The roots are used in a decoction either fresh or dried.
Medical Terminology: The roots are considered to have aromatic, carminative and stomachic activity (10, 51).
Related Disease Symptoms: The Cheyenne Indians made a tea from the roots for tight or bloated stomachs (24). The Indians used the decoction as a wash for sore and inflamed eyes (24, 73, 75). Ojibwe women drank a tea from the roots which made parturition easier (75). Indians of this area used a tea of the roots as a gargle for sore throat (75). To regain flesh and strength, the Meswaki drank a tea made from the roots of *Osmorhiza longistylis* and *Gleditsia tricanthes* (73).
Biological: The roots are known to have a stron anise flavor (15, 34).
Personal Experimentation: I have made teas from the roots and found the anise flavor weak in the specimen I experimentd with. No ill effects were encountered.

91. Osmunda cinnamonea.

Family: *Osmundaceae.*
Common names: Cinnamon-fern, buckhorn, fiddle-heads.
Stem: Underground rhizomes.
Leaves: Dimorphic fronds, oblong lanceolate, up to 2 m, edible in early spring, while in a fiddlehead.
Flower Type: Fertile frond, reddish-brown, up to 1 m.
Fruit: Microscopic brown spores.
Roots: Lateral off stolons.
General: Grows in groups, common, perennial.
Habitat: Stream banks, moist woods.
Season of Availability: The fiddleheads are collected in the late spring. The time period varies according to locale but rarely lasts longer than 2 weeks.
Preparation: Only the curled up fron looking like a fiddlehead is collected. Once the frond starts unraveling, it becomes bitter. Fiddleheads can be eaten raw as a salad green or cooked in stews or soups. The fiddlehead can also be placed in pickle juice for a great pickle.
Biological: The spring fiddleheads are edible raw or cooked (15, 47).
Personal Experimentation: I find the raw fiddleheads leave a strong after taste, but in a salad with salad dressing, there is no problem. Cooked in soups, they are similar to asparagus.

Osmunda cinnamonea.



Panax quinquefolius.

92. Panax quinquefolius.

Family: *Araliaceae.*
Common names: Ginseng, sang.
Stem: Unbranched, smooth, 2 to 6 dm tall, green, erect.
Leaves: Whorl of 3 palmately compound leaves, 3 to 7 (usually 5) oblong-ovate to ovate leaflets, serrate, acuminate, green, leaflets from 6 to 15 cm long, green.
Flower Type: Greenish-white, perfect, terminal umbel, 2 styles, 1 to 2 mm, spring.
Fruit: Bright red berry, 1 cm in diameter, summer.
Roots: Fusiform taproot, 1 to 4 dm long.
General: Perennial herb, lives approximately 20 to 30 years, though there are stories of thousand year old plants (42); rare in this area.
Habitat: Rich forests.
Season of Availability: The roots are collected in the fall from plants that are more than 5 years old (19, 65). Some say that 3 year old plants are acceptable (36, 38).
Preparation: The root is prepared in many different ways. The easiest way is in a decoction, either fresh or dried.
Medical Terminology: There is no scientific proof to prove any of ginseng's therapeutic values (42, 65). However, it has been considered a stimulant (32, 36, 66), stomachic (19, 22, 35, 63, 68, 74) and an aromatic bitter (58, 65). The Chinese consider ginseng a great aphrodisiac (42, 50, 65) and a tonic (19, 22, 36, 38, 63). The Orientals pay high prices for the root because of its believed panacea properties (27, 38, 40, 42, 44, 50, 63, 66).
Related Disease Symptoms: Prolonged intake of ginseng is said to promote longevity and good health (19, 27, 42). Ginseng has been used to cure nervous complaints (22, 68), headaches, fevers (36) and cramps (63). Long use of the tea is thought to promote fertility in women (63). The tea is also used to relieve menstrual discomfort (63). To stimulate the appetite (40) and aid digestion the tea was taken internally (22, 68). The tea is used to relieve consumption, spasmodic disorders and dyspepsia (19, 22, 63, 68). The Chinese use the infusion as a heart tonic (65). The tea is drunk to stop or prevent vomiting (22, 63, 68). Chewing the root is supposed to strengthen the stomach against indigestion (63).
Biological: The Meskwaki used the root as a seasoner to make other remedies more powerful (73).
Commercial: Collectors can easily sell their roots to many drug companies (37).
Personal Experimentation: I have drunk ginseng tea many times. It is slightly bitter and produces a slight stimulating effect when large quantities are consumed.

93. Pinus strobus.

Family: *Pinaceae.*
Common names: White pine.
Stem: Woody, erect, tree, rough furrowed black bark, up to 70 m, young trees have smooth black bark.
Leaves: Alternate, linear needless, 5 needles to a folicle, triangular cross section, 8 to 13 cm long, green.
Flower Type: Monoecious; staminate flowers oval, orange catkin-like cones, 2 to 4 cm long; pistilate flowers in hard bracted cones, cones are subcylindrical, nodding resinous, 6 to 25 cm long, brown, flowers in the spring.
Fruit: 2 seeded winged nuts per cone bract, fall of second year after fertilization.
Roots: Large taproot.
General: Soft wood, perennial evergreen, valuable timber wood.
Habitat: Forests, sandy-loam sites.
Season of Availability: The inner bark and buds are collected in the spring. The resinous sap and needle-like leaves are collected in the spring, summer, fall and winter.
Preparation: The inner bark is dried, then it can be boiled and eaten or made into a decoction. The buds and leaves are made into an infusion, usually fresh. The resinous sap is put in hot water and made into an infusion or into a liniment or ointment.
Medical Terminology: The white pine is an expectorant (22, 27, 35, 36, 38, 44, 51, 58, 63, 68).
Related Disease Symptoms: To relieve headache, the Ojibwe crushed or boiled the leaves and applied them to the forehead (63, 70). Ojibwe Indians put the leaves in a small hole in the ground, placed hot stones on top of the leaves and inhaled the rising vapor to cure backache and headache (63, 70). The Menominees steeped the inner bark of the young trees and drank the tea to relieve chest pains (63, 70). To heal wounds and sores (27, 70) and as a plaster for burns and scalds, the Indians pounded the bark and used it as a poultice (36, 52, 63). The Chippewa Indians boiled the trunk of the young tree with the inner bark of *Prunus serotina* and *Prunus americana* until it was a mash. The mash was dried and resoaked in water when needed for a poultice on cuts and skin sores (10). The bark tea was thought useful in urinary and kidney troubles (64). The Indians used the inner bark made into a poultice to relieve piles (63). The needles have a high concentration of *vitamin C* (19) and were used to cure scurvy (47). The Indians used the male cones or strobili in a liniment for rheumatism (63). A decoction of the gummy

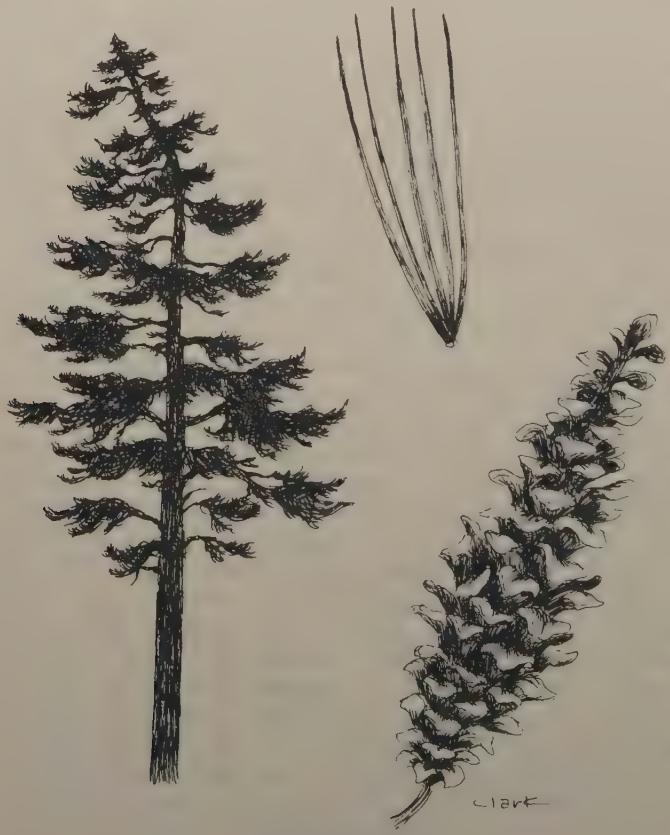
sap was used for sore throats, colds and consumption (22, 44, 52, 63, 68). The gum has also been used to relieve rheumatic and muscular aches (35, 36).

Biological: The inner bark is edible (15, 19, 79). The seeds are also edible.

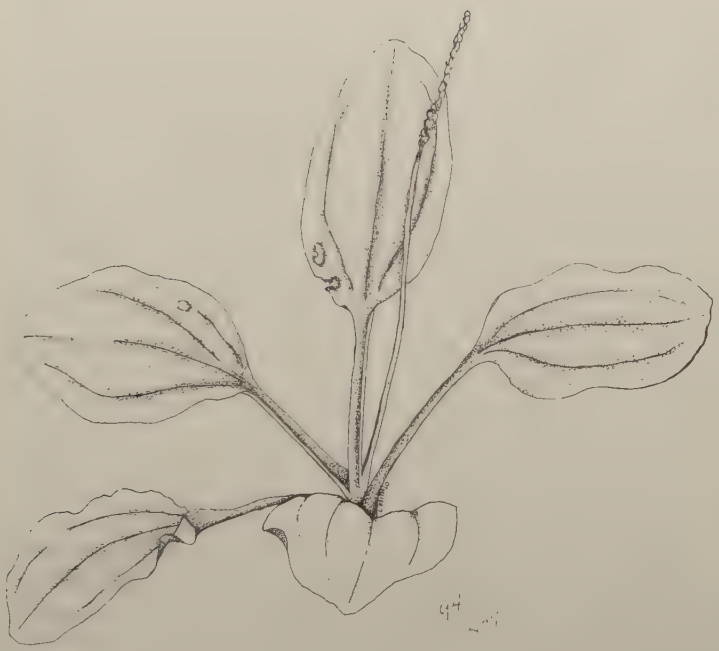
Chemistry: The volatile oil contains the compounds *bornyl acetate*, *pinene*, *carene* and *cadinene* (31).

Commercial: The volatile oil is considered antiseptic (27, 38) and is commercially used in inhalants (31). The dried inner bark is made into a cough syrup (19, 22, 27, 35, 52, 68), which is an official pharmaceutical preparation (2). The inner bark can be collected and sold to drug companies (37).

Personal Experimentation: I steeped two ounces of the leaves in one quart of boiling water for 15 minutes. I drank the quart of tea at one sitting, I thought it was a good tea. It has an after taste like turpentine. I drank a cup of the tea almost every day for one month and noticed no unusual effects.



Pinus strobus.



Plantago major.

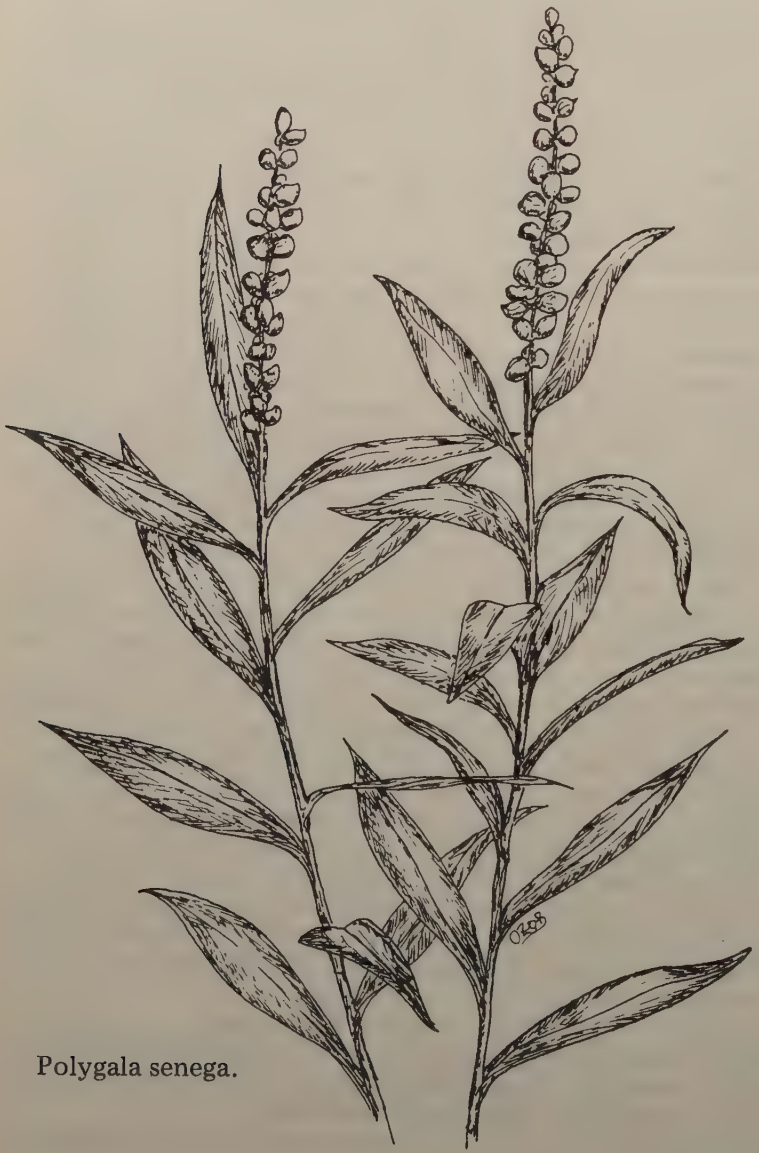
94. Plantago major.

Family: *Plantaginaceae.*
Common names: Plantain, whiteman's foot.
Stem: Stemless.
Leaves: Rosette, thick, broadly elliptic to oval, stongly nerved, smooth, entire to undulate, green, 5o to 20 cm long.
Flower Type: White, 4 sepals, small, up to 1 mm; spike heads on a tall scape, conic shape, spring, summer, fall.
Fruit: Brown conic capsule, summer, fall.
Roots: Fiberous.
General: Perennial herb.
Habitat: Fields, yards, roadsides, hard packed ground.
Season of Availability: The leaves are collected in the summer and fall. The seeds are collected in the late summer.
Preparation: The leaves are usually used fresh, in a poultice or ground into an ointment. The seeds are soaked in water and used in a cold or hot tea.
Medical Terminology: Plantain is considered diuretic in action (22, 30, 50, 57, 58, 68). It appears to also have some properties of a tonic (36) and a vulnerary (27, 38). The seeds soaked in water and ingested are used as a laxative (34, 36, 50, 56).
Related Disease Symptoms: Plantain has mainly been used to treat cuts, scratches and wounds (8, 22, 27, 30, 36, 38, 44, 50, 52). In these cases a poultice of crushed or macerated leaves is applied to the wound. The fresh leaves rubbed on the skin are supposed to relieve insect bites or stings (8, 22, 27, 40, 50, 68). The Rappahannock Indians bound the bruised leaves to the body to reduce fever (63). The menominee Indians heated the leaves and applied them to swellings (70). The Chippewas took the finely chopped roots of *Asarum canadense*, spread them on a plantain leaf and used it as a poultice on skin inflamations (10). Plantain leaves have been used as a poultice to stop rectal itch from piles (38, 44, 50). The fresh roots or leaves were boiled and applied to sore nipples for relief (36).
Personal Experimentation: I have used the crushed leaves many times on cuts and scratches and amazingly enough, they always got better, never worse.

95. Polygala senega.

Family: *Polygalaceae.*
Common names: Seneca-snakeroot.
Stem: Numerous from the rootstock, unbranching, smooth, 1 to 5 dm tall, green.
Leaves: Alternate, numerous, linear-lanceolate to ovate, acuminate, serrulate, 1 to 7 cm long, 2 to 15 mm wide, green.
Flower Type: White, in solitary terminal racemes, winged, 2 to 5 mm long, spring, summer.
Fruit: Rounded capsules, 2.5 to 3.5 mm long, brown.
Roots: Thick crown, stout, rhizome, prostrate main root.
General: Perennial herb.
Habitat: Dry rocky fields.
Season of availability: The root is collected in the fall.
Preparation: The root is dried and prepared in a tincture or decoction.
Medical Terminology: *Polygala senega* has many therapeutic actions. It is considered an expectorant (1, 27, 30, 66), emetic (29, 58, 63, 72) and cathartic (5, 32, 36, 38, 44, 51). Other actions attributed to it are diuretic (38, 51), diaphoretic (22, 30, 32, 58, 63, 72) and emmenagogue (5, 22, 36). It also has been considered as a dialagogue (5, 22, 30, 72). Less than 70 years ago, the dried roots were official (2).
Related Disease Symptoms: The Indians thought the root would cure rattlesnake bite (27, 36, 40) by chewing the root and applying it to the bite (63). However, it appears to be useless for that purpose (5). The decoction has been used to treat bronchitis and asthma (5, 66, 72). The decoction was supposably able to cure gout and pleurisy (36, 63). Because of the emetic and purgative action, it has been found to be useful in treating dropsy (22, 68) and rheumatism (5, 32, 63). It has been used as a stimulating expectorant in pulmonary affections (32, 36, 63). The decoction has been used for heart trouble (5, 36, 63). The decoction has been used to remove unwanted catarrhal deposits in the bronchial area (22, 27, 32, 68). Ojibwe Indians used a tea of the roots for coughs and colds and used a leaf infusion for sore throats (63). The tea has been used to treat amenorrhea and dysmenorrhea (5, 63).
Poisonous Aspects: The plant is the source of a poisonous irritant drug (33, 66). Overdoses have caused violent vomiting and nausea (22). There are reports of similar species that have been suspected in poisoning horses (33).
Biological: *Polygala senega* appears to effect the heart like digitalis (51).

Chemistry: The plant contains two saponin glucosides, *senegin* and *polygalic acid* (51, 58) and a small trace of *methyl salicylate* (1).
Commercial: Drug companies still buy the root from part time collectors (37).



Polygala senega.

Polygonatum

96. Polygonatum biflorum.

Family: *Lilaceae.*
Common names: Solomon's seal.
Stem: Slender, erect, curving or arching, smooth, green, 2 to 9 dm.
Leaves: Alternate, parallel veined, sessile, narrowly lanceolate to broadly oval, smooth, green, 5 to 15 cm long, 1 to 8 cm wide.
Flower Type: Greenish white, hanging in pairs from the leaf axils, tubular perianth, 14 to 25 mm long, spring.
Fruit: Blue to black several seeded berry, summer.
Roots: Knotty rhizome, prostrate, just below the surface, whitish, rootless are fiberous, 5 to 10 cm long.
General: Perennial herb, grows in small clumps.
Habitat: Rich forest floors.
Season of Availability: The root is gathered in the fall.
Preparation: The root can be used dried or fresh in a decoction or an infusion. Some prefer to powder the root before use.
Medical Terminology: Therapeutically, the root is considered astringent (50), tonic (38, 51) and demulcent (22, 30, 68).
Related Disease Symptoms: The root has been utilized to allay irritation of mucous surfaces (32, 58). A wash made from the boiled root was used to treat poison ivy (32, 36, 50). This same wash has been used for erysipelas (22, 51) and skin sores (50). The cut up roots, boiled in water were used as a poultice or wash to heal and relieve pain from hemorrhoids (22, 30, 36, 50). The root tea was thought to relieve pulmonary consumption and heal bleeding lungs (22, 68). The fresh root has been used as a poultice for bruises (50) and black eyes (22). The roots were also used to treat pain from arthritis, rheumatism (36) and gout (51).
Poisonous Aspects: The berries are known to contain an anthraquinone which can cause vomiting and diarrhea (40).
Biological: The young shoots are cooked and eaten like asparagas (15, 22). The roots are considered edible (22, 79).
Commercial: Drug companies periodically purchase the roots (37).
Personal Experimentation: I have made a tea from one ounce of the root to one pint of water. The tea was very bland. I noticed no effects whatsoever from drinking two cups.

Populus balsamifera.

97. *Populus balsamifera.*

Family: *Salicaceae.*
Common names: Balsam poplar, hackmatack.
Stem: Woody tree, up to 30 m high, corrugated black bark at the bottom, smooth yellow bark at the top.
Leaves: Alternate, broadly lanceolate to ovate, acuminate, subcordate at the base, shiny on the upper surface, petiolate, dark green, over wintering in large resinous buds.
Flower Type: Catkins, staminate and pistilate, spring.
Fruit: Winged capsule, summer.
Roots: Taproot.
General: Perennial deciduous tree, resinous, aromatic.
Habitat: Moist forests, stream and river banks, lake shores.
Season of Availability: The resinous buds are collected in the winter or very early spring. The bark and root can be gathered in the spring, summer, fall, or winter.
Preparation: The buds are made into an ointment, tincture or infusion. The bark and root are used in a decoction.
Medical Terminology: *Populus balsamifera* is reputed to be tonic, stimulant (58) and slightly antiperiodic in action (32). Though, many others highlight its tribute as an expectorant (10, 27, 44, 58). The resinous buds are known to have analgesic properties (40). The air dried winter leaf buds have been considered official, utilized in 4 gram doses (2).
Related Disease Symptoms: The Indians made a salve out of the winter buds and fat and put it in their nostrils to relieve congestion from colds, catarrh and bronchitis (27, 38, 40, 63). The same salve was rubbed on the skin for muscular aches and pains (10, 63). The Chippewa Indians mixed the resinous buds of balsam poplar with *Quercus rubra*, *Populus tremuloides* and *Polygala senega* and used the decoction as a heart remedy (10). For back pain, the Chippewas drank the decoction made from the root of *Populus balsamifera* and *Cirsium spp.* root (10). In the case of excessive menstrual flow, the Chippewas boiled the roots of balsam poplar and *Populus tremuloides* for a tea that was drunk every hour (10). Many Indian tribes made a salve from the balsam buds and fat to heal skin sores and infections (27, 63). The bark decoction or tincture has been used to treat pulmonary ailments, rheumatism and gout (36, 38).
Poisonous Aspects: The resinous buds have caused dermatitis (40).

Prunella vulgaris.

98. Prunella vulgaris.

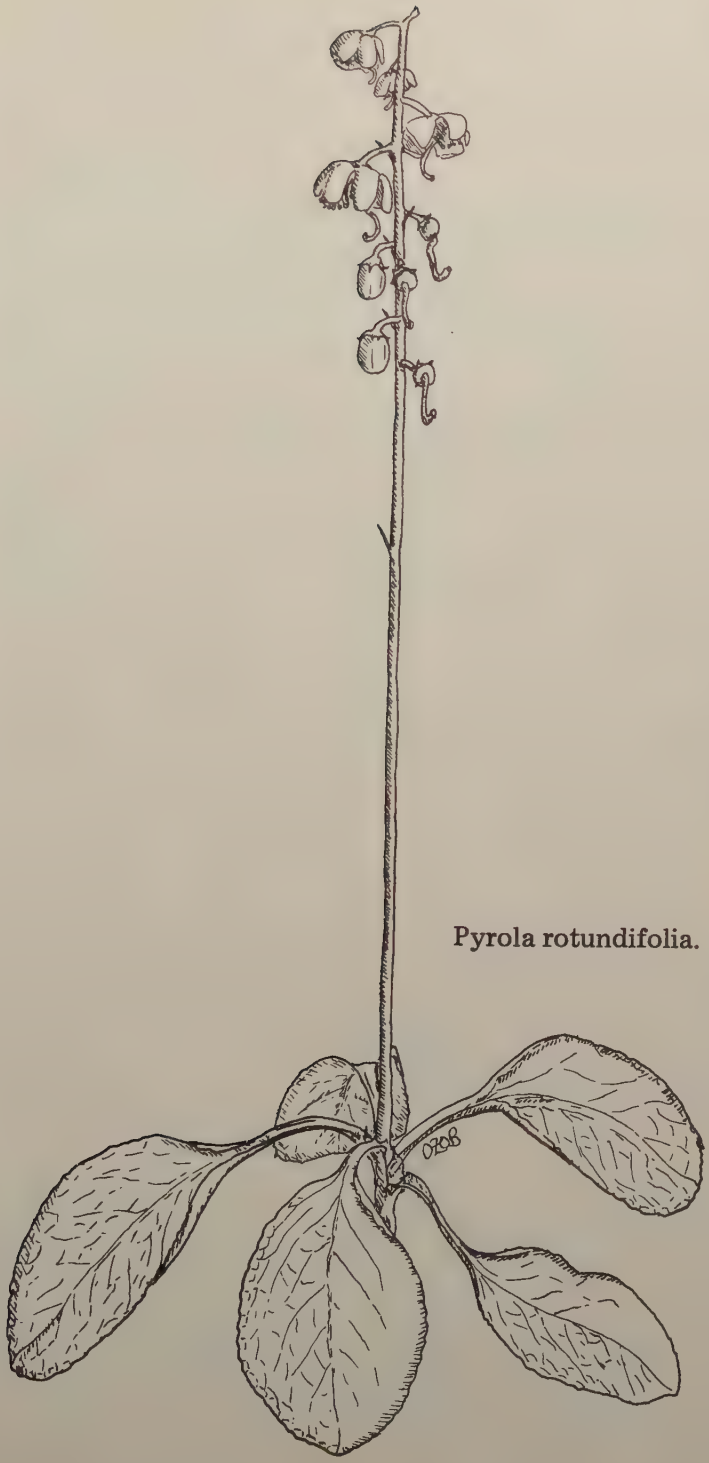
Family: *Labiatae.*
Common names: Self-heal, heal-all, carpenter-weed.
Stem: Square, hairy to smooth, sometimes branched, decumbent to erect, 1 to 5 dm tall.
Leaves: Opposite, oblong-ovate to lanceolate, entire, 2 to 9 cm long, petiolate, green.
Flower Type: Purple to white, tubular, in 3 flowered clusters, grouped in a terminal head, definate bracts, spring, summer, fall.
Fruit: Small nutlet, summer, fall.
Roots: Fiberous.
General: Perennial herb, common.
Habitat: Open fields, open woods.
Season of Availability: The herb is collected in the spring, summer and fall.
Preparation: It is dried or used fresh in an infusion or poultice.
Medical Terminology: Self-heal appears to mainly be an astringent (22, 27, 35, 56, 68). It also has some carminative action (36, 38). The Chippewas steeped the root with catnip leaves and used the tea as a physic (10).
Related Disease Symptoms: Self-heal's main use is that of a gargle for sore throat and throat irritations (22, 27, 36, 38, 68). The fresh leaves or infusion has been used as a styptic to stop hemorrahaging (36, 38, 55). The bruised leaves were once bound to the throat of people suffering with quinsy as a cure (55). To stop diarrhea, one cup of the infusion is taken every half hour (27, 36, 38, 55). For piles, the herb infusion was used as an enema (22).
Chemistry: The herb contains a volatile oil (58).
Commercial: It is on the list of marketable plants (37).

99. Prunus serotina.

Family: *Rosaceae.*
Common names: Black cherry, wild cherry, rum cherry.
Stem: Woody tree, erect, up to 30 m, black bark, branches have reddish-black bark, gum exudations common, inner bark aromatic.
Leaves: Alternate, oblong-ovate, acute, serrate, main vein, petiolate, green, 3.5 to 15 cm long, lustrous above.
Flower Type: 5 white petals, many stamens, 2 to 4 cm across, fragrant, spring.
Fruit: Red to black single seeded drupe, shiny, fleshy, juicy, edible, summer.
Roots: Taproot.
General: Perennial tree, deciduous.
Habitat: Dry woods.
Season of Availability: The bark and the inner bark can be gathered in the spring, summer, fall and winter. The fruit is collected in the summer.
Preparation: The bark is prepared in a syrup, decoction or infusion. The fruit is eaten, pressed into a juice, fermented into wine or dried.
Medical Terminology: Wild cherry bark is sedative (27, 52, 63), tonic (5, 51), astringent (58) and pectoral (10, 22, 68). After all that, its main use appears to deal with having expectorant (32, 36) and flavoring properties (38, 72).
Related Disease Symptoms: The bark decoction or syrup is used to stop coughing (22, 32, 52, 68), treat colds (36, 40) and treat cholera (38, 72). The primary utilization of the bark is with consumption (5, 32) from catarrhal and bronchial affections (22, 27, 68). Chippewas dried and pounded the root of the black cherry, mixed it with the dried powdered root of *Ledum groenlandicum* and applied the powder directly on skin ulcers and sores to heal them (10). The inner bark was boiled with the tunk of a young *Pinus strobus* and the inner bark of *Prunus americana* until it was a mash; then the mash was dried and resoaked when needed as a poultice for cuts (10). The Ojibwe and Chippewa used the inner bark, boiled, bruised or chewed as an application to external sores (10, 63). During the first pains of labor, Cherokee women were given a warm infusion of the bark (36, 63). The infusion of the bark was given to relieve pains in the chest (63). The pounded bark was used by the Indians as a poultice on amputated frozen members (63). The dried fruit or bark tea has been used to stop diarrhea (36, 52, 63). The bark tea was thought to lower the pulse and lower the temperature in intermittent fever (5). The Chippewa used the root tea for worms and infantile cholera (10).

Poisonous Aspects: There is approximately 212 mg *hydrocyanic acid* per 100 gm of leaves, in other words it is lethal (33). All types of livestock have been killed by eating black cherry leaves (33, 46). There are documented cases of human death from ingestion of black cherry leaves (33). However, the dried leaves contain no hydrocyanic acid or practically none (33).
Biological: The fruit is edible (9, 15, 25).
Chemistry: The bark contains *tannic* and *gallic* acids, *hydrocyanic* acid and a volatile oil (32, 58).
Commercial: The cough syrup made from the bark is the official preparation (1, 32, 44, 51, 59). The bark can be collected and sold to drug companies (37).
Personal Experimentation: For years I have eaten wild black cherries fresh, in pies and jams.

Prunus serotina.



Pyrola rotundifolia.

100. Pyrola rotundifolia.

Family: *Pyrolaceae. (Ericaceae).*
Common names: Shinleaf, wintergreen, round-leaved pyrola.
Stem: Stemless.
Leaves: Rosette, thick, leathery, round to obovate, shiny, margined petiole, crenate, 2 to 5 cm long, green.
Flower Type: White to pink, 5 petals, waxy, concave, 10 stamens; 1 to 2 cm across, raceme stands on a scape that is 1 to 3 dm tall, summer.
Fruit: Minute and innumerable seeds, summer, fall.
Roots: Fiberous.
General: Evergreen perennial herb, grows in small clumps.
Habitat: Sandy soils, bogs, open woods.
Season of Availability: The herb is collected in the spring, summer or fall.
Preparation: The herb is used in an infusion, dried or fresh.
Medical Terminology: *Pyrola rotoundifolia* is considered astringent in action (22, 30, 44, 63).
Related Disease Symptoms: For cankers and irritations in the mouth and throat, Indians used Pyrola tea as a gargle (44, 63). The decoction of the plant was used to heal skin wounds and sores (40, 63). To treat sore and inflamed eyes, the decoction was used as a wash (22, 30, 44). The root tea was used by the Indians to treat weakness and back problems (63).

101. Rhus spp.
Rhus glabra and Rhus typhina.

Family: *Anacardiaceae.*
Common names: Staghorn sumac.
Stem: *Rhus glabra*, smooth black-red bark; *Rhus thyphina*, velvety red bark; both have stout branches, branching, orange wood, up to 6 m, but usually only up to 3 m in northern lakes area.
Leaves: Alternate, pinnately compound, 11 to 32 leaflets, leaflets are oblong-lanceolate, serrate, acuminate, green, 5 to 10 cm.
Flower Type: Sometimes dioecious, greenish-white terminal spikes, spikes cone-shaped and about 8 cm tall, summer.
Fruit: Red drupes in clusters; *Rhus typhina's* are very velvety; *Rhus glabra's* have very small hairs, fall.
Roots: Taproot.
General: Perennial deciduous shrub.
Habitat: Dry rocky soils, open fields and meadows.
Season of Availability: The bark of the stem and roots are collected in the spring or fall. The ripe fruit is collected in the late summer and fall.
Preparation: The fruit is usually used fresh in an infusion, but can be utilized dried. The bark is usually dried and used in a decoction.
Medical Terminology: Sumac is considered astringent (38, 39, 44, 52, 63) and refrigerant in action (10, 22, 30, 32, 35, 51, 56, 58, 68). It also has hemostatic properties (27, 40, 52, 63).
Related Disease Symptoms: For sore throat, the infusion of the fruit is used as a gargle (15, 22, 25, 27, 30, 32, 35, 36, 40, 44, 51, 56, 58, 63). To stop bleeding in women after childbirth, a tea made from the fruit was used as a wash (63). The hot fruit infusion was taken internally to reduce fever (22, 27, 35, 36, 52). The Indians use a wet poultice of the leaves or berries to cure poison ivy (63). The root bark has been used to heal and treat burns (27, 36, 63). For cuts and sores, a decoction of the bark was used (27, 36). The root bark decoction was used to treat hemorrhoids (22, 30, 40, 63). The bark decoction was used to halt diarrhea (22, 36, 52, 68). The Chippewa took the flowers and combined them with alum root as a remedy for children with sore mouths during teething (10). The leaves have been smoked as a treatment for asthma (36, 38).
Biological: The Indians mixed the leaves with willow leaves and smoked the mixture like tobacco (63). Antibiotic tests have shown sumac to inhibit the growth of gram + and - bacteria (57).

bacteria (57).

Chemistry: The leaves and the bark contain *tannic* and *gall* acids (32, 58). A yellow dye is made from the roots (22, 70)

Commercial: The dried leaves are a commercial source c tannin (29). The plant can be collected and sold commerciall (37).

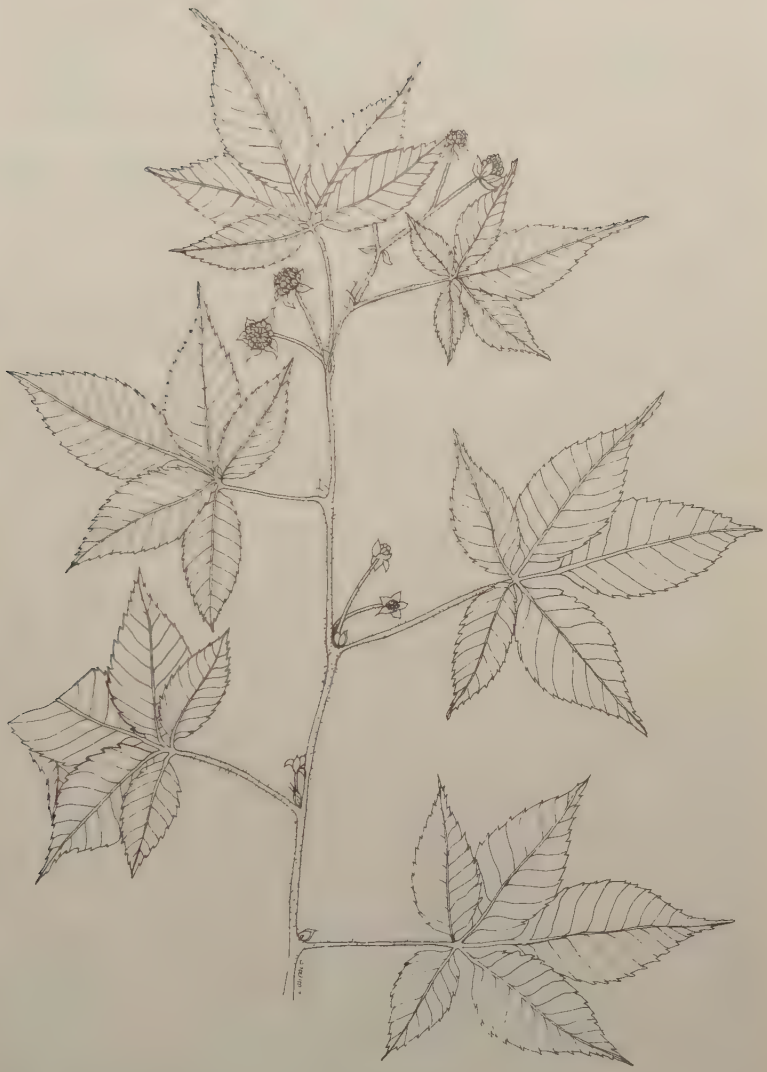
Personal Experimentation: I took three clumps of the rip fruit, poured 2 quarts of boiling hot water over them an let the mixture steep. I then cooled the tea and drank it. I was extremely astringent, so I added honey. This made i taste almost exactly like lemonade. I drank over a quart o this at one sitting and noticed no effects whatsoever.

Rhus spp.

Ribes americanum.

102. Ribes americanum.

Family: *Saxifragaceae.*
Common names: Wild black currant.
Stem: Woody, ascending, up to 2 m, sometimes with prickles, branching, shrubby.
Leaves: Green, suborbicular, 3-5 lobed, doubly serrate, 10 cm across.
Flower Type: White or yellow, drooping racemes from branch axils, tubular, spring.
Fruit: Black, round, sweet, juicy, edible, summer.
Roots: Woody, lateral.
General: Perennial, decicuous.
Habitat: Slopes, undergrowth in forests, meadows.
Season of Availability: Currants are collected in the late summer.
Preparation: The fruit is eaten fresh or cooked into jams, jellies, or pies. Currents can be dried like raisens.
Related Disease Symptoms: For kidney trouble, the Omaha drank a strong decoction of Ribes root (70). Women of the Winnebago tribe drank the stron root decoction for uterine problems (70). The leaves and stalks of both *Caltha palustris* and *Ribes spp.* were brewed in a decoction and drunk by the Chippewa when urination did not occur (10).
Poisonous Aspects: Though no experimentation has been done on Ribes, other members of the Saxifragraceae family are known to be toxic to humans (33).
Biological: The berries are edible raw or cooked (10, 15, 25).
Personal Experimentation: In my wanderings, only once have I found a large patch of Ribes. The patch was near Copper Harbor, Michigan and is presently a parking lot. The berries are great either fresh, dried, or cooked in pies or jellies.



Rubus spp.

Family: *Rosaceae.*
Common names: Raspberry and blackberry.
Stem: Reddish canes, brittle, thorns, erect to arching.
Leaves: Alternate, compound, palmate for blackberry, pinnate for raspberry, 3 to 5 leaflets, ovate to obovate, serrate, acuminate, petiolate, green.
Flower Type: 5 white petals, in a corymb, numerous stamens, spring.
Fruit: Red to black clustering druplets, succulent, juicy, edible, late summer, fall.
Roots: Running prostrate taproot.
General: Perennial decidious shrubby herb.
Habitat: Open fields and meadows.
Season of Availability: Collect the roots and rootbark during the spring or fall. The leaves and fruit are collected in the summer and fall.
Preparation: The roots and root bark are used fresh or dried in a decoction. The leaves are dried completely, then used in an infusion. The fruit is eaten fresh, dried or made into an infusion or syrup.
Medical Terminology: *Rubus* is considered astringent (27, 32, 38, 52, 63, 68) and tonic (5, 22, 30, 51).
Related Disease Symptoms: The root bark tea is used to cure diarrhea (5, 8, 18, 22, 27, 30, 38, 51). The same root bark tea has been utilized to control dysentery (22, 27, 30, 36, 38, 40, 51, 63). The root tea is thought to prevent vomiting (40). Chewed in the mouth, the fruit is supposed to remove tarter deposits on the teeth (27, 52). The Indians gave their children a root decoction for bowel trouble (63). The Potawatomis washed sore eyes with the root bark tea (63). A tea of the leaves has been used as a gargle for sore and irritated throats (22, 27, 30). An extract from the leaves has been used to alleviate pains from labor (27). The leaf or root tea is used as a wash to heal wounds and sores (22, 68).
Biological: The berries are edible (15, 18, 29, 30, 34, 47).
Commercial: The fruit, squeezed and made into a syrup is an official pharmaceutical preparation (2, 32). The roots can be collected and sold to drug companies (37).
Personal Experimentation: Blackberries and raspberries are commonly eaten in pies, jams and jellies throughout the Great Lakes area. I have eaten *Rubus spp.* berries ever since I can remember.

104. Rumex crispus.

Family: *Polygonaceae.*
Common names: Yellow dock, curly dock.
Stem: Smooth, erect, red to brown, up to 1.5 m.
Leaves: Whorled, strongly wavey-curled margins, lanceolate, acute, truncate to cordate at base, green, 15 to 30 cm long.
Flower Type: Green, terminal racemes, small flowers from 1 to 3 mm, summer.
Fruit: 3 angled grain-like achene, winged, 1 to 3 mm across, summer, fall.
Roots: Taproot, yellow.
General: Annual herb.
Habitat: Open fields and roadsides.
Season of Availability: The roots and leaves are gathered in the summer and fall.
Preparation: The roots are used in a decoction, fresh or dried. The leaves are used fresh as a poultice or squeezed for their juice. The powdered roots have been utilized as an abrasive tooth powder (40, 55). The root tea is made from one half ounce of the root to one pint of boiling water (19).
Medical Terminology: The root is used as an astringent (19, 35, 38, 44, 51, 55, 58) in a wash or ointment for skin diseases (10, 32, 36, 72). The root tea is utilized as a laxative (19, 22, 32, 38, 40, 52, 55, 56, 58, 63, 68) for constipation (36, 72). The root tea is also used as a tonic (52, 55, 58) and alterative (10, 19, 22, 32, 35, 40, 44, 51, 63, 68).
Related Disease Symptoms: The Indians put the crushed green leaves on boils to bring them to suppuration (36, 63). The Ojibwe and Chippewa Indians used the dried and pounded root as a poultice to heal cuts (10, 63). The dried and powdered root was used by the Chippewas by wetting the powder on a cloth and applying it to itching and eruptive skin (10). To reduce swelling, the Chippewas used the freshly mashed root in a poultice (10). In Appalachia, a wash used to treat ringworm was made by putting the root of dock in venegar (36, 38). The Cheyenne pulverized the dried root and made a decoction for lung hemorrhages (24). The decoction of the root has been used as a wash for many skin diseases (10, 22, 32, 36, 63, 72). Years ago, the root tea was used as a blood purifier (19, 35).
Poisonous Aspects: The leaves are known to have caused dermatitis (46).
Biological: The brown seeds can be pounded into an edible flour (15, 19, 25). The young spring leaves can be eaten as a pot herb (15, 19, 25, 34, 47).
Commercial: The root is saleable to drug companies (37).

Personal Experimentation: In the spring, I have eaten the leaves as a pot herb for many years. Being that the seeds are plentiful and easy to obtain, I collected a large bag full and tried to use them as sprouts. The experiment was a disaster being that I could only get a few seeds to sprout with each batch I experimented with.

Rumex crispus.

Salix spp.

105. Salix spp.
Salix nigra and Salix alba.

Family: *Salicaceae.*
Common names: Black willow.
Stem: Flaky dark brown to black bark, young branches green, flexible, up to 20 m.
Leaves: Alternate, lanceolate, acute, serrate, stipulate, deep green, 5 to 15 cm long, 5 to 15 mm across.
Flower Type: Dioecious, greenish with yellow bracts; staminate flowers have 2 basal glands, 3 to 5 free arching filaments; pistillate flowers with a basal gland, syle nearly obsolete; spring.
Fruit: 3 to 7 cm catkin with smooth ovoid capsules, spring, summer.
Roots: Taproot.
General: Perennial deciduous shrubby tree, common.
Habitat: Stream banks, wet areas.
Season of Availability: The bark is collected in the spring.
Preparation: The bark can be used fresh or dried in a decoction or infusion. The bark is sometimes powdered.
Medical Terminology: The bark tea is used as a tonic (5, 32, 38, 39, 50, 51, 58, 68) for dyspepsia (22), debility and convalescence (32). The bark tea's main use deals with its febrifuge action, that is to reduce and break a fever (5, 27, 32, 36, 38, 39, 40, 51, 63). To stop the return of malarial fever, the bark tea was used for its antiperiodic action (22, 32, 39, 44, 50, 58, 68). As a wash, it was considered astringent (1, 22, 38, 44, 51, 63, 68) for healing psoriasis and other skin diseases (5). The catkins have been thought to be aphrodisiac in action (22, 36).
Related Disease Symptoms: *Salicin* has been used beneficially in rheumatic pains (32, 50, 58, 68). To ease arthritic pain, the bark tea is ingested (27, 50). The Chippewa used the inner bark in a tea for indigestion (10). The root decoction was taken internally for dysentery (10, 22, 68). The Indians used the root tea to cure headache (40, 63). The tea has been used to curb diarrhea (22, 36, 68). Dyspepsia is another symptom that has been relieved by the tea (22, 32).
Biological: The inner bark of willow trees are edible and recommended for survival situations (79).
Chemistry: The bark contains *salicin)* (1, 27, 32, 40, 50, 58, 63).
Commercial: The bark can be collected and sold to drug companies (37).

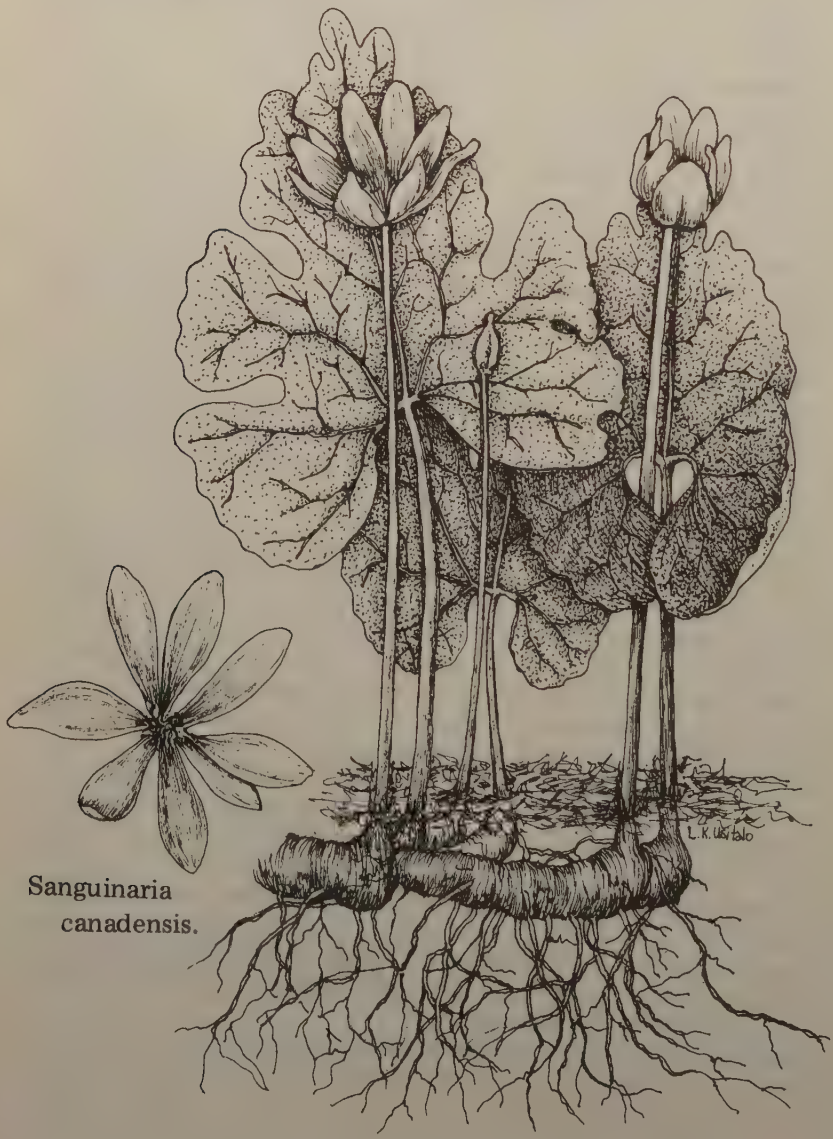
106. Sanguinaria canadensis.

Family: *Papaveraceae.*
Common names: Bloodroot, red puccoon.
Stem: Stemless.
Leaves: 1 palmate-lobed, crenate margins, red veins, green, 10 to 25 cm acro.
Flower Type: White, 8 to 12 petals, 2 to 4 cm across, solitary on a 15 to 40 cm smooth scape, 2 sepals that are soon falling, early spring.
Fruit: Fusiform capsule, spring.
Roots: Red thick rhizome, with blood red sap.
General: Perennial herb, early spring plant, all signs of existance gone by mid summer.
Habitat: Rich forest floors.
Season of Availability: The roots are collected in the early spring during flowering (13).
Preparation: The roots are used fresh or dried in a decoction or infusion.
Medical Terminology: There are a lot of actions attributed to bloodroot. Its main actions are emetic (40), expectorant (1, 10, 30, 32, 36, 51, 58, 63) and cathartic (5, 22, 38, 72). The seeds are thought to have narcotic properties (10, 51, 63). The powdered root, applied externally, is reputed to have well marked escharotic properties (22, 63, 72), but experimentation proves it to be practically useless (5). The dried rhizome has been considered official with the dose of .125 grams (2).
Related Disease Symptoms: The decoction is used to treat respiratory diseases (32) such as chronic bronchitis (38, 51, 68) and asthma (22, 27, 72). The Meskwakis chewed the root and placed their saliva with the root excretions on burns to heal them (36, 63). The Ojibwe squeezed the root sap onto a small lump of maple sugar and held it in the mouth to cure sore throat (36, 63). The root tea has been used to treat rheumatism (36, 40, 63). To cure skin fungus infections such as ringworm, the root was prepared in an ointment or the decoction was used topically (22, 27, 32, 68). The Chippewas made a root tea mixed with *Caulophyllum thalictroides* root for stomach pain (10). Other references have commented on the use of the tea for dyspepsia (22, 32, 35).
Poisonous Aspects: Overdoses of the root cause violent vomiting, severe thirst, a burning sensation, heavyness in the chest, difficult breathing, pupil dilation, muscular prostration and eventually death from cardiac paralysis (46). The sap has caused contact dermatitis (46).
Biological: The Indians made an insect repellant out of the root (63). The Indians used the root to paint their faces

(9). In antibiotic experiments, bloodroot showed gram + and - bacteria inhibition (57).

Chemistry: For dyeing, the roots are used fresh. A red dye comes from the root (22, 30, 38, 63). The root contains the alkaloid *sanguinarine* (13, 40, 51, 58), it belongs to the opium group having physiological activity midway between codeine and thebaine (1). The root is collected in the spring because that is when the amount of sanguinarine is the greatest (13).

Commercial: The root is of commercial value (37).



Sanguinaria canadensis.

Sarracenia purpurea.

107. Sarracenia purpurea.

Family: *Sarraceniaceae.*
Common names: Pitcher-plant, sidesaddle flower, huntsman's cup.
Stem: Stemless.
Leaves: Rosette, green with purple veins, winged recurved hairs at the apex, shaped like a pitcher, usually half filled with water and a few dead insects, 10 to 30 cm long, tubular, leathery.
Flower Type: Red to purple, on a 3 to 7 dm smooth tall scape, solitary, nodding, thick, leathery, 5 petals, 5 sepals, summer.
Fruit: Tiny seed capsule, summer, fall.
Roots: Fiberous.
General: Perennial herb, evergreen, leaves living more than one season.
Habitat: Bogs, wet acidic areas.
Season of Availability: Collect the roots in the spring, summer and fall.
Preparation: The roots are used fresh or dried in a decoction.
Medical Terminology: Therapeutically, the decoction is tonic (44, 51) and stomachic in action (22, 32, 58, 68).
Related Disease Symptoms: The Canadian Indians used the root tea to treat smallpox (22, 63, 68, 70). It was used by the Indians to sharpen their memory (27). Another report says the tea was supposed to cause forgetfulness of sorrow (22). The tea has been used with benefit in dyspepsia (22, 32, 44, 51, 68). Ojibwe women drank a tea of the root to assist parturition (75).
Poisonous Aspects: In overdose, a report states cerebral disturbances occured,and were attributed to the presence of a narcotic principal (32).
Biological: The Indians used the leaves as drinking cups (9).
Personal Experimentation: I heard this story about a man from the western Upper Penninsula of Michigan who lived to be 125 and attributed his old age to drinking the liquid in the leaves of the pitcher plant periodically. Whether the story is true or false, I don't know. I have drunk the liquid from the cup-like leaves with no harmful effects except of ingesting a few rotten insects.

108. Sassafras albidum.

Family: *Lauraceae.*
Common names: Sassafras.
Stem: Black to brown furrowed bark, woody tree, up to 40 m, branching, pale green twigs.
Leaves: Alternate; 3 lobed, 2 lobed palm-shaped, or ovate; entire, smooth, green, spicy, 5 to 9 cm long.
Flower Type: Green to yellow, peduncled corymb racemes, bracts, spring.
Fruit: Blue, ovoid, fleshy drupe, summer.
Roots: Lateral spreading roots, aromatic.
General: Perennial deciduous tree, in our lower area.
Habitat: Rich woods.
Season of Availability: The roots and root bark are dug up in the spring.
Preparation: The roots and root bark are made into a decoction. To make the tea, boil the root for 15 minutes and let it sit for 10 minutes.
Medical Terminology: Through experience I know the root bark tea is diaphoretic (35, 36, 38, 44, 63). Other attributes are stimulant (35, 36, 38, 44, 63), aromatic (5, 35, 44, 51) and a flavoring agent (32). The root decoction is used as a carminative for stomach distress (1, 35, 36, 38, 63). The pith is used in a topical application to inflamed eyes (35, 50, 68), because of its demulcent properties (5, 27, 29, 32, 51). Large quantities of the tea are said to have narcotic properties (18, 40).
Related Disease Symptoms: The Indians used the root bark tea as a wash for diseased eyes (63). It has been reported that a root bark poultice is used for sore and inflamed eyes (36). The Indians used the fresh or dried flowers for fevers (63). The root bark decoction was used to reduce fever (32, 63). The boiled root tea was used to treat measles and scarlet fever (63). The Seminole Indians used the tea for coughing, gallstones and pain in the bladder (63). Others report, the tea was used for kidney disorders (27, 36). The tea has been used to slow down the milk flow in nursing mothers (36). To relieve toothaches, the root bark is placed on the tooth (40).
Poisonous Aspects: Sassafras has been thought to be carcinogenic, yet it has been used to treat cancer (40).
Biological: The dried leaves, ground into a powder are used to thicken soup (25, 27).
Chemistry: The oil contains *safrole*, *isosafrole*, *pinene* and *camphor* (31).
Commercial: The distilled oil of the root bark has been considered official (2, 59). Most commercial sasafras oil

production is in the southern States (53).

Personal Experimentation: I have drank over 2 quarts of the decoction at one sitting. I noticed a distinct diaphoretic and diuretic effect. I drank at least on cup of the tea every day for more than a month with no unusual effects.

Sassafras albidum.

Scrophularia marilandica.

109. Scrophularia marilandica.

Family: *Scrophulariaceae.*
Common names: Maryland figwort, scrofula plant, carpenter's square, pilewort.
Stem: Angled, grooved sides, smooth, green, 1 to 3 m.
Leaves: Opposite, petiolate, serrate, rounded to cordate at the base, acute, green, 8 to 20 cm.
Flower Type: Reddish brown tubular, two lipped, 5 to 8 mm; pyramid shaped panicle often 10 to 15 cm wide, spring, summer.
Fruit: Globose capsule, 4 to 7 mm long, shiny brown, summer.
Roots: Fiberous.
General: Perennial herb.
Habitat: Open woods, forest borders.
Season of Availability: Collect the herb and root in the spring and summer.
Preparation: The herb and roots are used fresh or dried in an infusion.
Medical Terminology: Therapeutically, it is said to be tonic, diuretic and diaphoretic (36, 38).
Related Disease Symptoms: Years ago, the tea was thought to be effective in scrofula (58). The root infusion was used to treat anxiety and sleeplessness in pregnant women (36). In a poultice or ointment, it was used for skin diseases and scratches (36, 44). The tea has been used to increase menstrual flow (36). It has also been used to reduce hemorrhoids (36, 38).
Chemistry: It contains the compound *scrophularin* (58).
Commercial: The plant can be collected and sold to drug companies (37).

Scutellaria lateriflora.

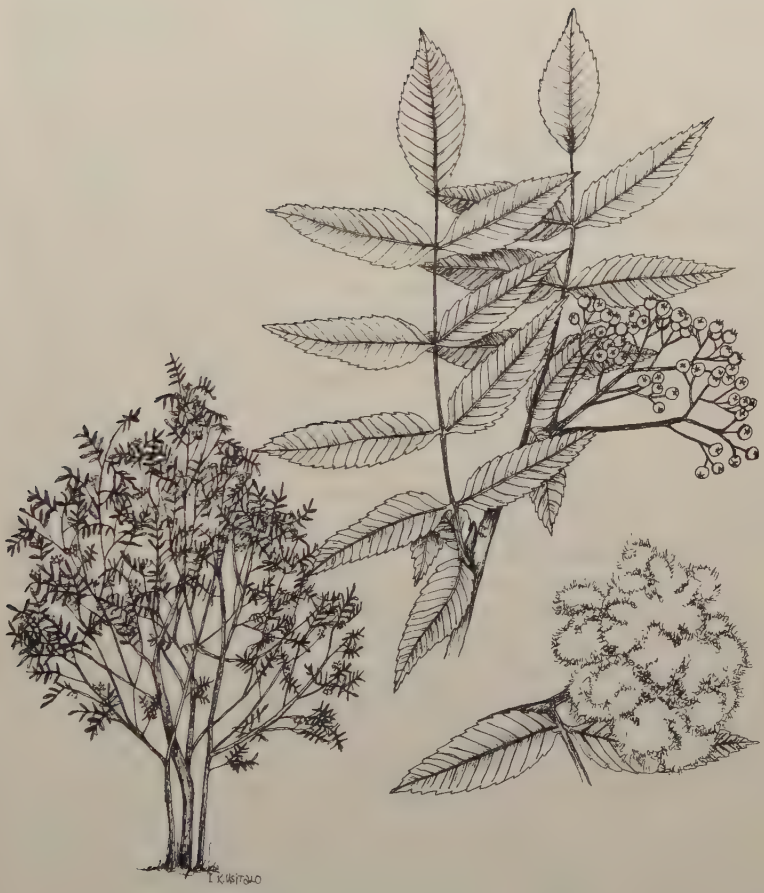
110. Scutellaria lateriflora.

Family: *Labiatae.*
Common names: Mad-dog skullcap, mad-dog weed.
Stem: Square, smooth, branching or simple, pilose on angles, green, 1 to 10 dm.
Leaves: Opposite, ovate, acute, petiolate, rounded at base, serrate, pinnately veined, 3 to 8 cm long, green.
Flower Type: Blue, tubular, lipped, 4 stamens, bract, 5 to 8 mm; axial erect racemes, summer, fall.
Fruit: Small nutlet, summer, fall.
Roots: Filiform rhizomes, stoloniferous.
General: Perennial herb, spreads mainly by roots.
Habitat: Wet fields, swampy woods.
Season of Availability: The herb is collected in the spring and summer.
Preparation: The herb is dried and used in an infusion.
Medical Terminology: The tea is used as a sedative (36, 38, 44, 58, 63) for neuralgia (8, 22, 27, 30, 35, 52, 68, 72). The infusion, which is considered antispasmodic (27, 35, 38, 51, 52, 58), was used for epilepsy and convulsions (8, 30, 72). The plant is also considered tonic in action (22, 27, 30, 35, 38, 44, 51, 58, 63, 68). The dried herb was once considered an official preparation with a one gram average dose (2). Johnson feels that it is very doubtful if *Scutellaria lateriflora* has any medicinal value at all (32).
Related Disease Symptoms: The Cherokees made a tea with some other plants and used it to promote menstruation (36, 63). One or two cups of the tea is supposed to cure nervous headaches (22, 27, 68). Years ago, the tea was thought to cure hydrophobia (22, 30, 35, 63). The tea taken internally, was also used to calm hysteria (22, 30, 36, 72).
Poisonous Aspects: Overdoses are supposed to cause giddiness, stupor, confusion and twitching (22).
Commercial: The plant is periodically bought by drug companies (37).

Solanum dulcamara.

111. Solanum dulcamara.

Family: *Solanaceae.*
Common names: Bittersweet, nightshade.
Stem: Woody vine, climbing, young growth green, old growth black to brown, branched.
Leaves: Alternate, ovate, acutinate, sometimes 2 to 4 small basal lobes, petiolate, smooth, entire, green, 5 to 7 cm long.
Flower Type: Purple corolla, anthers conspicuously yellow, 3 to 8 cm across, nodding, terminal cyme, summer, fall.
Fruit: Red ovoid berry, 8 to 11 mm in diameter, summer, fall.
Roots: Taproot.
General: Perennial woody vine, deciduous.
Habitat: Old fence rows, thickets, roadsides, forest borders.
Season of Availability: The young branches are collected in the fall.
Preparation: They are dried and used in a decoction or made into an ointment.
Medical Terminology: *Solanum dulcamara* is mainly resolvent, mildly narcotic (68) and alterative in action (22, 30, 35, 51).
Related Disease Symptoms: The twigs are made into an ointment and used to treat rheumatism (5, 22, 32, 58, 68). Allport notes that it has been utilized for rheumatism, but feels it is of doubtful value (1). The decoction has been used to treat pulmonary (5) and bronchial affections (22, 58). Indians mixed the crushed green leaves with grease and used it as a poultice on sores (63). The ointment or the decoction used topically was utilized in treating skin diseases, like eczema and psoriasis (5, 22, 30, 35, 44, 51, 68).
Poisonous Aspects: *The plant is considered poisonous* (5,46). If the berries are eaten in quantity, poisoning may result (46). Poisoning in livestock produces apathy, drowsiness, salivation, dyspepsia, trembling, paralysis, prostration and unconciousness (33). Poisoning in humans causes stupefacation, loss of sensation and eventually death from paralysis (33).
Chemistry: The plant contains *beta-scolarmarine* (40). It also contains the alkaloid *solanine* (46) and the saponine *dulcamarine* (51, 58).
Personal Experimentation: I have eaten small quantities of the berries; they are very bitter and I couldn't eat more than a few.



Sorbus americana.

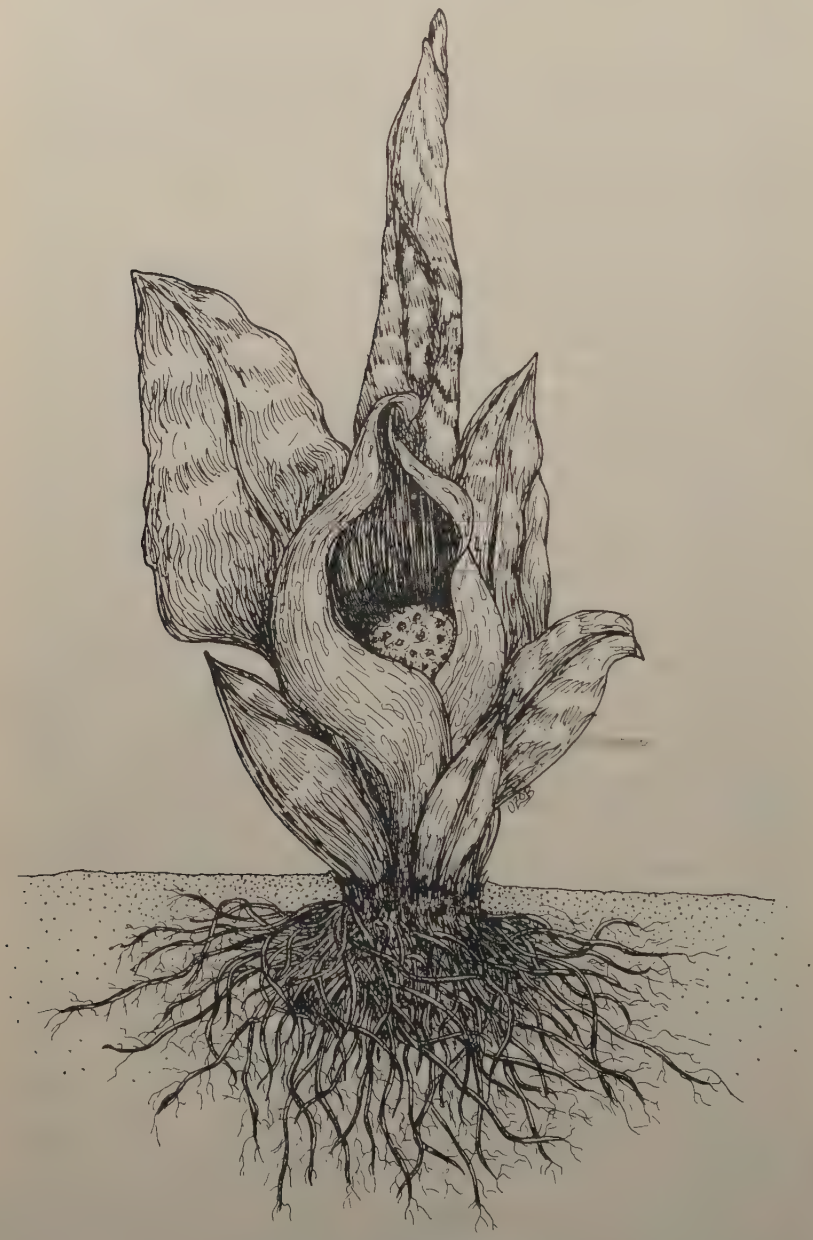
112. Sorbus americana.

Family: *Rosaceae.*
Common names: Mountain ash, roundwood, missey-moosey.
Stem: Woody, erect, lenticilate, up to 70 cm in diameter, up to 15 m tall, branching.
Leaves: Compound, 11-17 leaflets, lanceolate to oblong leaflets, serrate, acute.
Flower Type: White, flat topped cume, many flowered, 20 cm across.
Fruit: Red, juicy, pome, sour, edible and sweet after a couple frosts.
Roots: Woody, lateral.
General: Pioneer species, perennial, deciduous.
Habitat: Old fields, meadows, burned areas.
Season of Availability: *Sorbus americana* berries should be collected in the late fall after 1 or 2 frosts.
Preparation: The berries are very tart raw, but sweeten up after repeated frosts. The best preparation appears to be cooked into pies, jams or jellies.
Poisonous Aspects: Though there has been no experimentation on *Sorbus americana*, many members of the Rosaceae family are known to contain deadly poisonous cyanide type compounds (33).
Biological: The berries are edible when thoroughly ripe (15, 19, 25, 47). The berries can be dried and ground into flour (15). The berries can also be made into a nutritious juice (15). The berries contain *vitamin C* (19).
Personal Experimentation: It is easiest to collect the berries in the fall before a snow. Put them in a freezer, thaw and cook when needed. Being that they are very tart until repeated freezing and thawing, many people add sweetner. My experiences with *Sorbus americana* have only been eating the sweetened cooked mash. The flavor is similar to cherries.

113. Symplocarpus foetidus.

Family: *Araceae.*
Common names: Skunk cabbage, dracontium.
Stem: Stemless.
Leaves: Basal rosette, large broad leaves, 3 to 6 dm long, similar to rhubarb leaves, smooth, entire, green.
Flower Type: Purple. Spotted with green, 5 to 15 cm tall, ovoid shaped spathe, inrolled margins, conspicuous yellow stamens, late winter, early spring.
Fruit: Ovoid fleshy mass of spherical seeds.
Roots: Fiberous, fleshy, thick.
General: Perennial herb, foul smelling.
Habitat: Wet marsh, slow moving stream banks, swamps.
Season of Availability: The leaves and the roots are collected in the spring, summer and fall.
Preparation: The roots are used dried in a powder, ointment or decoction. The roots and leaves are used fresh as a poultice. The leaves are also used fresh as an inhalant.
Medical Terminology: Skunk cabbage is reputed to be antispasmodic (32, 35, 58, 63), slightly narcotic (22) and stimulant (19, 30, 44, 51, 52). The dried ground root is taken internally as an expectorant for asthma, catarrh and bronchial affections (19, 22, 27, 30, 32, 35, 36, 40, 44, 51, 52, 63, 68).
Related Disease Symptoms: The powdered root, mixed with grease is used as an ointment to ally rheumatic pains (22, 35, 36, 51, 52. To cure headaches, the Indians picked the fresh leaves, rolled them into a ball and inhaled the vapors (36, 40, 63, 64). In a poultice, the Indians used the fresh roots or leaves for sores and swellings (36, 52, 63). The fine rootlets and roots hairs were used by the Indians to stop the pain of toothaches (63). The fine root hairs were used as a styptic to stop bleeding from cuts and scratches (19, 63). A decoction of the dried roots was used to curb coughing (19, 30, 35, 36, 52). The plant has been employed in the treatment of hysteria (32, 51) and epilepsy (22, 36).
Chemistry: The whole plant contains *calcium oxalate* (19, 40).
Poisonous Aspects: Overdoses are reported to cause nausea, vomiting and headache (19, 22, 51). Death in humans and livestock is not known, probably because ingestion of more than one mouthful is rare (33).
Biological: The young leaves can be eaten after boiling twice (9, 15).
Personal Experimentation: One spring, I gathered some young leaf sprouts. I steamed them in two waters, put margerine on them and ate them. They were great, no harm-

ful effects at all. So, I tried it again, this time in only one steaming. This time it felt like my mouth was on fire, fortunately the pain subsided in about 15 minutes.



Symplocarpus foetidus.

114. Tanacetum vulgare.

Family: *Compositae.*
Common names: Tansy, golden-buttons.
Stem: Erect, slightly ribbed, smooth, branchless, green, up to 1.5 m.
Leaves: Alternate, pinnately compound, 1 to 3 times pinnately divided, segments are linear-oblong, toothed, aromatic, green, smooth, 10 to 30 cm long.
Flower Type: Yellow discoid heads of disk flowers, 5 to 10 mm across the head, 20 to 100 heads in the flat topped terminal corymb, aromatic, summer, fall.
Fruit: Tiny brown pappalate achenes, 1 mm long, silver-like, fall.
Roots: Stout rhizome, spreading.
General: Perennial herb, grows in large groups over taking an area, aromatic.
Habitat: Open fields, waste places.
Season of Availability: Collect the herb in the summer and fall.
Preparation: It is used in an infusion, fresh or dried. The oil is obtained by steam distillation. The tea is made from one ounce of the dried herb per one pint of boiling water.
Medical Terminology: Tansy has been used internally as an anthelmintic to expel worms (22, 33, 36, 38, 51, 58, 63, 66, 68). The tea has been used for amenorrhea (8, 32, 36), because of its emmenagogue action (10, 22, 35, 38, 51, 63, 68). The oil has produced fatal results (40, 66) when used as an abortifacient (32, 33, 36, 50, 51, 58, 63). The herb is also considered stimulant in action (22, 50, 51, 58, 63).
Related Disease Symptoms: Indians, pounded the plant and bound it to the head to relieve headache (63). The herb was used in a steam bath for sore and swollen feet and ankles (36, 63). Applied as a poultice, the bruised leaves were used to reduce swelling from sprains (8, 22, 32, 35, 36). For sore throat, the root was used in a tea as a gargle or chewed, by the Chippewa (10). The Chippewa used the leaves of tansy and Nepeta cataria, mixed equally, in a tea for fever (10). For earache, the Chippewas made a root decoction and dropped the luke warm tea into the ear (10). The Cheyenne used the tea for weakness and dizziness (24).
Poisonous Aspects: Overdoses, cause gastritis, convulsions and eventually death (33, 46). The oil is known to have caused contact dermatitis (40).
Biological: In antibiotic experiments, tansy showed gram + and - bacteria inhibition (57).
Chemistry: The plant contains tanacetin, malic acid and tannin (51). The volatile oil contains thujone (31, 58).

Commercial: Most of the commercial tansy production is in lower Michigan (53). Drug companies still purchase the herb (37).

Personal Experimentation: I drank one pint of the tea at one sitting and noticed no effects. The taste is agreeable.

Tanacetum vulgare.

115. Taraxacum officinale.

Family: *Composiate.*
Common names: Dandelion.
Stem: Stemless.
Leaves: Rosette, oblanceolate, decurrent, coarsely and irregularly toothed to pinnately cut, sometimes nearly entire, 6 to 40 cm long, green.
Flower Type: Yellow ray flowers in a head, solitary at the end of a 10 to 30 cm long purple to green scape, the scape is hollow and has milky sap, 150 to 200 heads per plant per summer, head is 2 to 5 cm across, spring, summer, fall.
Fruit: Small light brown achene on a parachute-like pappus, 1 to 2 mm long.
Roots: Deep black taproot, white in the center.
General: Perennial herb.
Habitat: Openfields, waste places, roadsides, yards.
Season of Availability: The roots are collected in the fall and winter. The leaves and flowers are collected in the spring, summer and fall.
Preparation: The root is used fresh or dried in a decoction. The root can also be roasted, ground and used in a decoction. The leaves and flowers are used fresh.
Medical Terminology: Therapeutically, the root is considered tonic (10, 51, 76), diuretic (34, 36, 57) and aperient in action (5, 22, 32, 44, 58, 63, 68, 73). The root decoction is also used as a mild laxative (1, 10, 22, 34, 36). The dried roots have been considered official (2).
Related Disease Symptoms: The root decoction has long been used internally for liver diseases (5, 8, 22, 27, 32, 40, 51, 58, 63, 68). To cure heartburn, the root tea was drunk by the Indians (36, 63, 75). The Meskwakis used the tea for chest pains (63, 73). A cup of the root decoction is supposed to cure dyspepsia (1, 5, 32, 58). The tea, before a meal, is used to promote appetite and aid digestion (22, 36). The white milky sap was placed on warts to remove them (40, 50).
Biological: The roasted and ground roots are used as coffee substitute (5, 15, 18, 22, 25, 34, 47, 50). The spring leaves are edible and used as salad greens (5, 15, 18, 34, 41, 47, 68, 74, 76). The plant has shown hypoglycemic activity (40).
Chemistry: Dandelion contains the compounds taraxacin, taraxacerin (1) and inulin (51, 58).
Personal Experimentation: I have eaten the leaves in salads for many years, if the leaves are bitter, boil or steam them, cool them and then use in a salad. I have roasted and ground the roots in hopes of finding a coffee subtitute and sure enough, the decoction was almost identical to coffee in

taste. It is common practice for Great Lakes people to gather dandelion flowers and use them to make wine.

Taraxacum officinale.

116. Thuja occidentalis.

Family: *Pinaceae.*
Common names: White cedar, arbor-viate.
Stem: Erect, woody, reddish brown shreddy bark, light colored wood, up to 20 m.
Leaves: Small scale-like, appressed-imbricated in 4 rows, 1 to 2 mm, green.
Flower Type: Monoecious, scale-like, small, terminal, green, 1 to 3 mm, spring.
Fruit: Cone bearing, brown, winged nutlet like seeds, fall.
Roots: Lateral taproot.
General: Perennial evergreen tree or shrub.
Habitat: Swamps and cool rocky stream banks.
Season of Availability: The leaves and branches are collected in the spring, summer, fall and winter. The cones are collected in the summer and fall.
Preparation: The leaves and twigs are used in an infusion or decoction, fresh or dried. The cones are ground into a powder. The Chippewa made a cough syrup from Ostrya virginiana wood and cedar leaves (10).
Medical Terminology: The main actions of cedar are emmenagogue (68) and diuretic (19, 22, 58). It also appears to be stimulant in action (19, 58, 63).
Related Disease Symptoms: The American Indians made a decoction of the leaves and used it to soothe coughs (68) and reduce fever (9, 22, 27, 35, 36, 50, 63). The oil or ground leaves mixed with grease was used as a topical ointment for rheumatism (9, 19, 22, 35, 36, 50, 63). This same ointment has been used for skin fungus diseases and wart removal (27, 32, 50, 68). For muscular aches, the Indians used the branches in sweat baths (63). The tea has also been used to treat scurvy (9, 22, 35, 36). The Chippewa used the burned and charcoaled wood combined with bear grease, rubbed on the temples and pricked with needles, as a remedy for convulsions (10). For relief from rheumatism, the cones, ground into a powder and mixed with fern leaves, was rubbed on painful joints (36). Catarrhal affections is another use for cedar tea (9, 32, 35). The tea has been used for amenorrhea, that is to promote minstruation (19, 32, 63).
Poisonous Aspects: Overdoses are thought to produce abortion (22, 27, 63). Convulsions are another symptom of overdose (19, 63).
Biological: The dried leaves can be made into incense (27, 63).
Chemistry: The volatile oil contains thujone (58), cedrene and cedrol (31).
Commercial: Cedar leaf oil has been considered official (59). Most of the commercial production of cedar oil is from

wild plants in northern New England (53).

Personal Experimentation: By steeping one ounce of the herb to one pint of boiling water, I made two quarts of the tea. I drank one quart of the tea within one hour, while I put the other in the icebox to cool. The next morning I drank the other quart. The only noticable effects were that of a diuretic and clearing mucous from the mucous membranes, other than that, nothing.

Thuja occidentalis.

Trifolium pratense.

117. Trifolium pratense.

Family: *Leguminosae.*
Common names: Red clover, cleavergrass.
Stem: Slightly hairy, ascending or suberect, tends to bend over due to its own weight, green, from 5 to 40 cm tall, branching.
Leaves: Alternate, palmately 3 foliate compound, serrate, stipulate, lower leaves long petioled, upper leaves short petioled, distinct white striped arch across each leaflet, green.
Flower Type: Red, tubular, 10 t0 20 mm long, in terminal heads that are 3 cm across, spring, summer, fall.
Fruit: Tiny round nutlet, brown, summer, fall.
Roots: Fiberous, nodule forming.
General: Short-lived perennial herb.
Habitat: Open fields, roadsides.
Season of Availability: Collect the flower heads during the summer and fall.
Preparation: The flowers are dried and used in an infusion or made into a syrup.
Medical Terminology: Clover is said to be alterative (30, 35, 50, 51, 58) and antispasmodic in action (22, 38, 50, 68). It's main action, used in a tea or syrup, is sedative (38, 58) for whooping cough (22, 35, 36, 44, 47, 51, 68). The dried flowers have been considered official in pharmaceutical preparations (2).
Related Disease Symptoms: A cup of the infusion is supposed to improve the appetite (36, 38). The infusion used as a wash or made into a salve is used for skin ulcers and skin sores (8, 30, 36). The tea has also been thought to be good for liver ailments (36, 38).
Poisonous Aspects: There are some reported physiological problems occurring in cattle when too much clover was ingested, but nothing serious or reocurring (33).
Biological: The seeds and dried flowers are edible (34). The herb can be cooked and eaten (34).
Commercial: Drug companies still purchase the herb (37).
Personal Experimentation: Using one ounce of the herb to one pint of boiling water I have made a tea and drank over a quart at one sitting with no unusual effects what so ever. Clover blossom tea was recommended to me by an Ojibwe woman from Baraga. She told me that her mother and grandmother gave her the tea for persistant coughs.

Trillium erectum.

118. Trillium erectum.

Family: *Liliaceae.*
Common names: Stinking benjamin, purple trillium, squawroot.
Stem: Stout, erect, 15 to 60 cm tall, green, smooth.
Leaves: Single whorl of 3 terminal leaves, rhombic-ovate broad, prominately netted, 5 to 15 cm long, sessile, green smooth.
Flower Type: Purple to light crimson, 3 petals, 3 green sepals 3 to 7 cm across, standing on a terminal erect peduncle early spring.
Fruit: Dark red 6 angled berry, summer.
Roots: Thick, stout, brown, up to 3 cm thick.
General: Perennial herb, small groups, rare.
Habitat: Rich forests.
Season of Availability: The roots are dug up in the late summer or fall.
Preparation: The root is chewed fresh or used in an infusion fresh or dried.
Medical Terminology: Trillium is considered astringent (38, 44, 52, 72), tonic (22, 63, 68) and alterative (32, 35, 58). It has also been considered emmenagogue in action (35, 38, 51). The Indians put the root in food that was to be eaten by their special someone, to produce aphrodisiac actions (36, 38).
Related Disease Symptoms: The Indians used the infusion for sore nipples (63). To reduce eye swelling, the Menominees made a poultice of the grated raw root (63). They also steeped the grated root and drank the infusion for cramps and menstrual irregularity (63). The steeped ground root tea has been used to treat menorrhagia (9, 27, 32, 35, 68, 72). The root tea has been used for internal and external hemorrhaging (9, 22, 27, 32, 36, 68, 72). To help promote child birth, the Indians drank a root infusion (22, 36, 52, 63, 68). The ground root has been used applied as a local irritant in healing skin ulcers and skin sores (22, 32, 36, 72). The chewed root was used to slow down heart palpitations (36, 63).
Chemistry: The root contains the saponin, trillin (31) and tannin (58).
Personal Experimentation: I have made one pint of the tea using one half ounce of the root in boiling water. I drank the pint at one sitting, it was very bland and slightly bitter. I noticed no effects.

Typha latifolia.

119. Typha latifolia.

Family: *Typhaceae.*
Common names: Cattail, bulrush, flag.
Stem: Stout, stiff, erect, smooth, green, 1 to 3 m.
Leaves: Alternate, mostly basal, sheathing, long linear, parallel veined, 1 to 1.5 m long, 6 to 23 mm wide, pale green.
Flower Type: Monoecious; staminate flowers, tiny green cylindric tubes that turn to yellow pollen, grouped in a cigar-shape above the pistillate flowers; pistillate flowers, tiny green cylindric tubular, grouped in a cigar-shape which turns brown and even looks like a cigar, spring, early summer.
Fruit: Tiny nutlets connected to downy hairs, brown, fall.
Roots: Stout, rhizome, lateral root, thick, white.
General: Perennial, growing in great groups.
Habitat: Marsh, slow moving streams, ponds.
Season of Availability: The roots of the cattail are gathered in the spring, summer, fall or winter. Collect the immature flowers in the late spring, for eating. The seeds and floss are collected in the fall.
Preparation: The root is used fresh as a poultice or in a decoction, fresh or dried.
Related Disease Symptoms: The Cheyenne Indians used the dried and pulverized root in a decoction to relieve cramps in the abdomen (24). The freshly chopped root has been used as a poultice for skin wounds and burns (36, 76). The down has also been used in the treatment of burns (36, 54). The root has been used in the treatment of diarrhea (36).
Poisonous Aspects: The pollen is a cause of hay fever (40). There is one case of horse poisoning connected with Typha latifolia (33, 40).
Biological: The floss has been used for insulation and as a buoyancy material (18, 29, 75). Great Lakes Indians used the leaves for mats and shingles (73, 74, 75, 76). The roots, young sprouts and underdeveloped flowers are edible (15, 18, 25, 34, 47, 79). The pollen can be used as a flour substitute (15, 18, 34, 47, 79). The pollen is high in vitamin A (18).
Personal Experimentation: I have eaten almost all the parts of cattail with no ill effects. My favorite is the immature flowers cooked like corn on the cob. I have found the easiest way to procure the root flour is after collection, wash the roots thoroughly, cut them into 3 cm lenghts, put them in an electric blender with 3 times the water, blend for 1 minute, pour the mixture in a bowl, wait 3 to 4 hours, scrape the floating fibers off the top, stir for an even mixture, pour through a sieve, and 2 to 3 hours later decant the excess water and the flour is ready for use.

Vaccinium anguistifolium.

120. Vaccinium angustifolium.

Family: *Ericaceae.*
Common names: Blueberry, huckleberry, bilberry.
Stem: Woody, bushy, intricate branching, stoloniferous, thin scaley bark, 2-3 cm in diameter, up to 1 m.
Leaves: Green, narrowly lanceolate, .7-2 cm long, glabrous, minutely spinulose-serrulate, alternate.
Flower Type: White, bell-shaped, 5-6 mm long, in racemes, aromatic, spring.
Fruit: Blue to black berry, 6-9 mm in diameter, very sweet, edible, late summer, fall.
Roots: Fiberous, off many stolons.
General: Bushy, perennial, deciduous, grows in groups, common.
Habitat: Boggy wet soils, dry sandy soils.
Season of Availability: The berries are collected in the late summer.
Preparation: Blueberries can be eaten fresh, made into pies, syrup, or jam. The berries can be pressed and dried for future use.
Related Disease Symptoms: To treat 'craziness', the Chippewa placed dried blueberry flowers on hot stones and inhaled the fumes (10).
Poisonous Aspects: Though blueberries are thought to be harmless, the foliage of many members of the Ericaceae are highly toxic (33).
Biological: The berries are edible raw or cooked (10, 15, 18, 47, 78, 79).
Personal Experimentation: Picking blueberries is a favorite past time of many Great Lakes people. When I was 7 or 8, I remember spending all day in the woods picking blueberries, then bringing them back to town and selling them door to door for 50 cents a quart. Even with all that money to be made, I'd make sure and bring at least 1 quart home for my mother to make a blueberry pie.

Vaccinium macrocarpon.

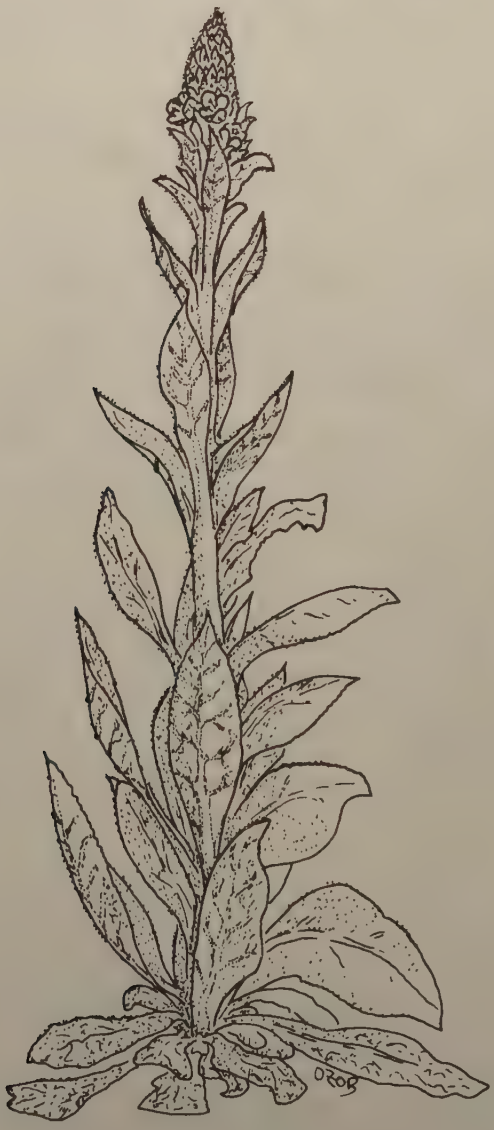
121. Vaccinium macrocarpon.

Family: *Ericaceae.*
Common names: Cranberry, bog cranberry, american cranberry.
Stem: Prostrate, dark red, intricate forking, 2-6 mm thick, up to 1 m long.
Leaves: Green, oblong-elliptic, blunt tip, 6-17 mm long, whitened beneath, slightly revolute, alternate.
Flower Type: Pink, bell shaped with recurved petals, on a long pedical, spring.
Fruit: Red, sometimes with mottled white spots, round to ellipsoid, 2-4 cm long, edible, late fall.
Roots: Fiberous.
General: Perennial, deciduous, grows in groups, berries look like marbles on the ground.
Habitat: Wet bog soils, usually in open areas.
Season of Availability: Cranberries can be collected in late fall around the end of October and well into December.
Preparation: The tart cranberries can be eaten fresh or cooked into a sauce or jelly. The berries can be pulped into juice. The berries are also commonly prepared in muffins and pancakes.
Related Disease Symptoms: Cranberry juice is ingested as a folk remedy to cure bladder problems.
Poisonous Aspects: Though cranberries are thought to be harmless, the foliage of many members of the Ericaceae family are highly toxic (33).
Biological: Cranberries are edible raw or cooked (15, 18, 47.
Personal Experimentation: Picking cranberries off of a sphagnum bog is like picking up marbles from a carpet. The process can be back breaking. Cranberry bogs are always wet, so plan on it. My favorite recipes are cranberry muffins and cranberry pancakes. Cranberry juice can be easily made by placing the berries in an electric blender.

122. Verbascum thapsus.

Family: *Scrophulariaceae.*
Common names: Mullein, flannel-plant, aaron's rod, Indian tobacco.
Stem: Stout, stiff, erect, branchless, densely wooley, grayish-green, 1 to 2 m tall.
Leaves: Alternate, oblong, acute, densely woolly, decurrent to stem, entire to crenate, 20 to 40 cm long, first year plant only has a basal rosette.
Flower Type: Yellow, 5 petal-like lobed tubular corolla, 15 to 25 mm across, ephemeral, in a large terminal tightly packed spike, throughout summer and fall.
Fruit: Small, black, ellipsoid capsule.
Roots: Taproot.
General: Biennial, rosette first year keeping its leaves through the winter, flower stalk appears the 2nd year, followed by death.
Habitat: Open fields, waste places, rocky soils.
Season of Availability: The leaves and flowers are collected in the summer and fall. The root is dug in the fall.
Preparation: The leaves are used fresh in an infusion or dried and smoked or used in an infusion. The flowers are used for their volatile oil. The roots are used dried. To make an ointment, soak the flowers in olive oil for 21 days in the sunlight (19, 36).
Medical Terminology: Therapeutically, mullein is demulcent (30, 32, 44, 51, 58, 68) and emmollient (19, 22, 27, 35, 56).
Related Disease Symptoms: To relieve asthma congestion, the leaves are dried and smoked (8, 19, 27, 35, 36, 38, 40, 51, 52, 55, 63, 76). The dried leaves are used in a tea or smoked to treat congestion in the chest and catarrhal affections (8, 19, 22, 27, 30, 40, 44, 51, 52, 68). An infusion of the leaves has been used with benefit to stop coughing (8, 19, 22, 27, 30, 40, 44, 51, 52, 68). The Choctaws smoked the leaves to relieve asthma and sore throats (36, 63). The Choctaws put the leaves on their heads to cure headache (63). For pulmonary diseases, the dried root was utilized by the Menominees (63, 74). The flowers have been used in a remedy for tuberculosis (40, 63). The soaked leaves have been used in a poultice to relieve hemorrhoids (19, 22, 30, 36). The leaf tea was used to curb diarrhea (19, 22, 35, 44). Dropped into the ear, the ointment was used to cure earache (19, 22, 36).
Biological: The leaves are smoked as a tobacco substitute (39, 74). In antibiotic experiments, mullien showed gram + and - bacteria inhibition (57).

Chemistry: A yellow dye is made from the flowers (19).
Commercial: The plant can be collected and sold to drug companies (37).
Personal Experimentation: I have drank over a pint of the infusion at one sitting with no ill effects. I made the infusion by using one ounce of the dried leaves to one pint of boiling water.

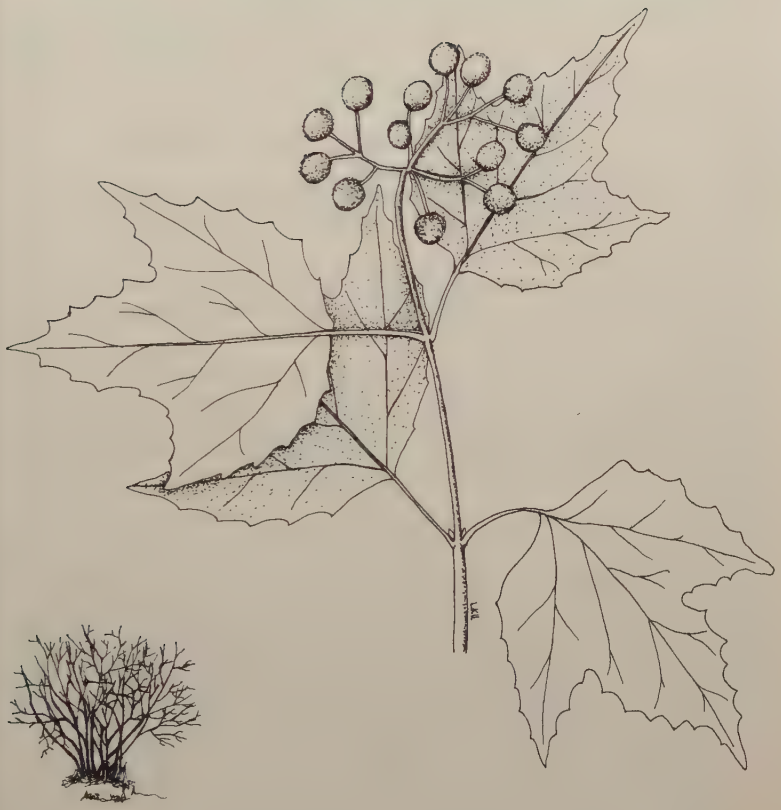


Verbascum thapsus.

Viburnam opulus.

123. Viburnam opulus.

Family: *Caprifoliaceae.*
Common names: Highbush cranberry, geulder-rose, cramp bark.
Stem: Woody, gray smooth bark, branching, up to 4 m.
Leaves: Opposite, 3 lobed, palmately veined, coarsely toothed, maple-like, stipulate, 7 to 10 cm long.
Flower Type: White, 5 lobed corolla, 5 stamens, pedunculate, in a concave topped cyme, 5 to 10 cm across, spring.
Fruit: Red, single seeded fleshy drupe, 10 to 15 mm in diameter, fall.
Roots: Taproot.
General: Perennial deciduous shrub, bushy.
Habitat: Moist woods, rocky slopes.
Season of Availability: The bark is collected in the spring, summer, fall and winter.
Preparation: The bark is made into an alcohol extract or into a decoction.
Medical Terminology: Therapeutically, *Viburnam opulus* is antispasmodic (19, 44, 51) and sedative in action (22, 30, 32, 63, 68). The bark is also considered a uterine sedative (19, 27, 71) because it acts specifically on the uterus (32).
Related Disease Symptoms: The Ojibwe made a tea from the bark which was taken internally for stomch cramps (19, 22, 63, 68, 73, 74, 75). The bark tea was also used for menstrual cramps and pains, technically known as dysmenorrhea (19, 27, 30, 32, 71). The tea has been used to relieve asthma and convulsions (19, 22). In cases of threatened abortion, the tea or extract was ingested (32, 71).
Poisonous Aspects: Johnson found, in his experiments, that use of cramp bark caused nausea and vomiting in his patients and considered it much over rated (32).
Biological: The berries contain vitamin C and are considered edible (19, 36).
Chemistry: *Viburnam* contains the glucoside, viburnin and valeric acid (71).
Commercial: It appears as though there is some sort of controversy in the validity of cramp bark's authenticity, since it looks as though the commercial cramp bark consists of Acer spicatum bark, a mistake made by unknowledgeable collectors years ago (14).



Viburnam trilobum.

124. Viburnam trilobum.

Family: *Caprifoliaceae.*
Common names: Highbush-cranberry, pimbina.
Stem: Woody, gray bark, shrubby, branching at top, up to 4 m, 1-5 cm in diameter.
Leaves: Green, ovate, palmately 3-5 ribbed, rounded, rounded at base, 3 lobes long acuminate, entire in sinus.
Flower Type: White, terminal cymes, 4-15 cm across, summer.
Fruit: Red drupe, globose to ellipsoid, sour, edible, sweet and juicy after repeated frost, late fall.
Roots: Woody, lateral.
General: Perennial, deciduous, bushy, grows in groups.
Habitat: Stream banks, lake shores.
Season of Availability: Highbush-cranberries can be picked after a frost in the late fall and into winter. Before that time, the berries are too tart.
Preparation: The highbush-cranberries can be made into jam, jelly, pies, or used as an addition to muffins of pancakes. The berries can be eaten raw.
Related Disease Symptoms: For cramps and colic, the Menomini drank a tea made from the inner bark (63, 70). The Chippewa made a decoction from the inner bark of tag alder and highbush-cranberry and ingested the tea as an emetic (10).
Biological: The berries are edible raw or cooked (15, 19, 25, 47).
Personal Experimentation: In my search for highbush-cranberries, I have never gathered more than a quart at one time because I haven't found a plentiful supply. I have met a few people that haven't found any problem with collection. The berries are very tasty and make good jam.

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GLOSSARY OF BOTANICAL TERMS

ACHENE: A small, dry, hard, 1-seeded fruit.
ACUMINATE: Tapering at the end to a gradual point.
ACUTE: Terminating in a sharp or well defined angle.
ACUTINATE: Being acute.
ALTERNATE: (Leaves) borne singly at a node, first on one side, then on the other.
ANGLED: Having distinct edges.
ANNUAL: Living a single season.
ANTHER: The pollen producing part of the stamen.
APEX: Upper end or tip (of leaf, petal, etc.).
APPRESSED: Lying flat and close against another structure.
ARIL: A fleshy structure that forms around a seed, such as, seed covering on yew.
AROMATIC: Having a distinct aroma, usually from a volatile oil.
AURICLE: Ear-shaped appendage or lobe.
AWN: Slender, usually stiff, terminal bristle.
AXIL: Angle formed between the leaf and the stem, or branch and stem.
AXILLARY: In an axil.
BARB: Ridged points or short bristles usually reflexed like a fish hook.
BASAL: Pertaining to the bottom, or the starting point.
BASE: The bottom, the originating spot.
BEAK: A projection ending in an elongated tip.
BEARDED: Bearing long or stiff hairs.
BERRY: A fleshy fruit having a thin skin with the seeds surrounded by the pulp, such as the tomato.
BIENNIAL: Living only two years and flowering the second year.
BISEXUAL: Having both stamens (male organs) and pistils (female organs) on the same plant, such as in perfect flowers.
BLADE: Flattened, green portion of a leaf.
BRACT: A small leaf, often scalelike and usually subtending a flower or inflorescence.
BRACTED: Having bracts.
BRISTLE: A stiff hair.
BRISTLY: Having bristles.
BULB: Underground bud surrounded by modified fleshy leaves, such as onions.

Glossary of Botanical Terms (Continued)

BULBOUS: Having the character of a bulb.
CALYX: The outer, usually green, portion of the flower.
CANES: Usually branchless stems that live for a few years then are replaced by new ones, such as blackberry stems.
CAPITATE: Arranged in a head, or dense cluster.
CAPSULE: A dry fruit composed of several units, which separate and open at maturity.
CARPEL: A simple pistil, or one unit of a compound pistil.
CATKIN: A dry scaly spike of flowers, usually unisexual, such as flowers of willow, alders, and birches.
CAULINE: Belonging to the stem.
CHAFF: The scales or bracts on the receptacle of many composite flowers.
CHLOROPHYLL: The green coloring compound responsible for converting sunlight into chemical energy and the plant's green color.
CILIATE: Fringed with hairs.
CLASPING: Partly surrounding another structure at the base, such as mullien's leaves clasp the stem.
CLAVATE: Club shaped, gradually thickening upward.
CLEFT: Deeply cut.
COARSE: Rough surface.
COMPOUND: Composed of 2 or more similar parts united into one whole.
COMPOUND LEAF: A leaf divided into separate parts called leaflets.
CONES: Seed producing structures of conifers.
CONIC: Cone shaped.
CONNATE: United, used especially of like structures, such as leaves, joined from the start.
CONNECTIVE: The portion of a stamen that joins the two anther cavities.
CONSPICIOUS: Easily noticed.
CORDATE: Heart-shaped, the broadest part at the base.
CORM: The enlarged, solid, bulblike base of some stems.
COROLLA: The second or inner set of floral parts, composed of separate of united petals, usually conspicuous by its size and/or color.
CORONA: A crownlike structure on inner side of the corolla, as in milkweed.

CORYMB: A flat-topped or convex flower cluster, the outer flowers opening first. Achillea millifolium is an example.
CREASE: A fold or the appearance of a fold.
CRENATE: Having rounded teeth.
CRENULATE: Finely crenate.
CRESTED: Bearing elevated ridges on projections, especially on petals.
CUNEATE: Shaped like a wedge.
CUSPIDATE: Tipped with a cusp or sharp and firm point.
CYANTHIUM: Cuplike involucre around the flowers, such as in the spurges.
CYLINDRIC: Shaped like a cylinder.
CYME: A convex or flat flower cluster, the central flowers unfolding first. Tanacetum vulgare is an example.
DECIDUOUS: Not persistant, such as trees that drop their leaves every year are deciduous.
DECOMPOUND: More than once compound or divided.
DECUMBENT: Stems in a reclining position, but with the end ascending.
DECURRENT: Extending downward, applied to leaves in which the blade is extended as wings along the petiole.
DELTOID: Shaped like a terminal triangle.
DENTATE: With sharp teeth.
DENTICULATE: Minutely dentate.
DIADELPHOUS: Refers to stamens which are combined in two, often unequal sets.
DICOTYLEDON (dicot): Plant with 2 seed-leaves or cotyledons. In practice usually recognized by net veined leaves, the parts of the flower in 4's or 5's, the fibers of the stem in a ring.
DIOECIOUS: Unisexual, with two kinds of flowers on separate parts of the inflorescence.
DISCOID: Resembling a disk.
DISK: Central part of the head of many compositae flowers.
DISK-FLOWER: In compositae flowers, the tubular flowers in the center of the head, or comprising the head. Tanacetum vulgare has only disk flowers.
DISSECTED: Cut or divided into narrow segments. Artemesia absinthium has highly dissected leaves.

DOWNY: Covered with fine and soft hairs.
DRUPE: A fleshly fruit with a single hard stone (seed) in the center, such as peach, plum, and cherry.
DRUPLETS: A diminutive drupe, each unit of a raspberry or blackberry fruit.
ELLIPSOID: Elliptic. Oval. In outline, widest at the middle and narrow about equally at the ends.
ELLIPTIC: In the form of an ellipse, rounded about equally at both ends.
ENTIRE: With a continuous, unbroken margin; without teeth, scallops, or lobes.
EPHEMERAL: Lasting for one day or less.
ERECT: Standing straight up.
EVERGREEN: Persistant leaves through out the year, not decidious.
FERTILE: Capable of normal reproductive functions.
FIBEROUS: Having long tough stringy fibers.
FILAMENT: The stalk of the stamen.
FILAMENTOUS: Threadlike.
FILIFORM: Thread shaped, long, slender and terete.
FLEXOUS: Curved alternately in opposite directions.
FOLIATE: Having leaves.
FOLIOLATE: Having leaflets.
FOLLICLE: A dry fruit developed from a single ovary, opening by a slit along one side, such as a milkweed pod;
FRUIT: The seed-bearing product of a plant; the ripened ovary with such other parts as may be attached to it.
FUSIFORM: Spindle shaped, swollen in the middle and narrowing gradually toward each end.
GELATINOUS: Having a mucous like gelatin layer.
GLABROUS: Smooth, especially not pubescent nor hairy.
GLAND: A secreting structure or surface.
GLOBOSE: Round or nearly round.
GLUTINOUS: Covered with a sticky exudation.
HERB: The part of the plant above the ground, a plant with no perennial parts above the ground.
HIRSUTE: Covered with rather coarse or stiff hairs.
HIRSUTULOUS: Slightly hirsute.
HISPID: With ridgid or bristly hairs or with bristles.
IMBRICATE: Overlapping, either vertically or spirally, where the lower piece covers the base of the next

higher; or laterally as in the aestivation of a calyx or corolla, where at least one piece must be wholly external and one internal.
IMBRICATED: Being imbricate.
INDEHISCENT: Not opening at maturity.
INDUSIA: The covering of the fruiting structure on the underside of a fern leaf.
INFLATED: Blown up, bladdery.
INFLORESCENCE: Arrangement of flowers on a stem.
INTOLERANT: Needing sunlight, a plant that needs an open area or lots of sun.
INTRODUCED: Brought intentionally from another region, as for the purpose of cultivation.
INVOLUCRE: A circle or collection of bracts surrounding a flower cluster, head or single flower.
IRREGULAR: Showing inequality in the size, form or union of its similar parts.
LACINIATE: Slashed, cut into narrow pointed lobes.
LANCEOLATE: Shaped like a lance, several times longer than wide, broadest toward the base and narrowed to the apex.
LATERAL: Belonging to or borne near the sides.
LEAFLET: A single unit of a compound leaf.
LEATHERY: Having the texture of leather.
LENTICEL: A type of gas exchange pore found in the bark of many trees, such as the elongated brown spots in birch bark.
LENTICILATE: Having lenticels.
LINEAR: Long and narrow with parallel margins.
LIP: Each of the upper and lower divisions of a bilabiate corolla.
LIPPED: Having lips.
LOBED: Having lobes.
LOBELESS: Not having lobes.
LOBES: Any rounded portion of an organ.
LOCULAR: Having locules.
LOCULE: A cavity.
LUSTROUS: A dull shine.
MARGIN: The edge.
MEMBRANACEOUS: Thin, rather soft, more or less translucent and pliable.

Glossary of Botanical Terms (continued)

MIDRIB: The central or main rib of a leaf or similar structure.
MIDVEIN: The middle most vein, the most prominent vein.
MINUTE: Very small.
MONOECIOUS: With stamens (male) and pistils (female) in separate flowers on the same plant.
MOTTLED: Splotchy, different colors in splotches.
NERVE: A simple or unbranched vein or slender rib.
NETTLED: Same as reticulated.
NODE: The place upon a stem which normally bears a leaf or whorl of leaves.
NODULE: Diminutive of node.
NUT: A hard 1 seeded fruit, which has no natural lines for opening.
NUTLET: A diminutive nut.
OBCORDATE: Inverted heart-shaped, with the point basal.
OBLANCEOLATE: Lanceolate with the broadest part toward the apex.
OBLONG: Two to three times longer than broad and with nearly parallel sides.
OBOVATE: Inverated ovate.
OBSOLETE: Not evident, extinct.
OBTUSE: Blunt or rounded at the end.
OPPOSITE LEAVES: Two leaves at a node.
OVAL: Broadly elliptical.
OVARY: The part of the pistil which contains the ovules.
OVATE: Egg-shaped, having the outline like that of an egg shape.
OVOID: A solid with an ovate outline.
OVULE: Embryonic seed.
PALMATE: Radiately lobed or divided, palm shaped.
PALMATELY: In a palmate manner.
PANICLE: A loose irregularly compound inflorescence with pedicellate flowers, such as a branched raceme or corymb.
PANICULATE: Flowers borne in a pancile like structure.
PAPILLOSE: Bearing minute nipple-shaped projections.
PAPPALATE: Having a pappus.

PAPPUS: The modified calyx in compositae, forming a crown of hairs at the summit of an achene.
PARASITIC: Growing on and deriving nourishment from another living organism.
PEDATE: Palmately divided or parted, with the lateral segments 2 cleft.
PEDICEL: The supporting stem of a single flower or leaf.
PEDUNCLE: A primary flower stalk, supporting either a cluster or a solitary flower.
PEDUNCULATE: Born on a peduncle.
PERENNIAL: Lasting year after year.
PERFECT: (Flower) having both functional pistil and stamens.
PERFOLIATE: Having the stem apparently passing through the leaf.
PERIANTH: The floral envelope, consisting of the calyx and corolla.
PERSISTANT: Enduring, as a calyx upon the fruit, leaves through the winter.
PETAL: A unit of the corolla.
PETIOLATE: Having a petiole.
PETIOLE: The support stem of a leaf stalk.
PETIOLULATE: Having a petiolule.
PETIOLULE: The foot stalk of a leaflet.
PILOSE: Hairy, especially with soft hairs.
PINNATE: Compound with the leaflets arranged on each side of a common axis.
PINNATELY: Being pinnate.
PINNULE: One of the smallest units of a several compound leaf.
PISTIL: The seed bearing organ of the flower, consisting of the ovary, stigma and style.
PISTILATE: Provided with pistils.
POLYGAMOIOEOUS: Polygamous but chiefly dioecious.
POLYGAMOUS: With hermaphrodite and unisexual flowers on the same or on different individuals of the same species.
PRICKLY: Having sharp out growths from the epidermis.
PROSTRATE: Lying flat on the ground.
PUBESCENCE: Having the property of being pubescent.
PUBESCENT: Covered with hairs, especially short and soft or down-like.

Glossary of Botanical Terms (continued)

RACEME: A simple inflorescence of pedicelled flowers upon a common axis.
RAY FLOWER: The ligule or strap-like marginal flower of many compositae, when differentiated from the disk flowers.
RECEPTACLE: The more or less expanded portion of a stem which bears flower organs or the collected flowers of a head.
RECURVED: Curved downward or backward.
REFLEXED: Abruptly bent or turned downward.
RESIN: Sticky clear amber sap of pines or similar substances in other plants.
RESINOUS: Containing resin.
RETRORSELY: Directed back or downwards.
RHIZOME: Any prostrate or subterranean stem, usually rooting at the nodes and becoming upcurved at the apex.
RHOMBIC: With the outline of an equilateral oblique-angled figure.
RIBBED: With prominent vein formations.
RIDGED: The outer surface angled prominently with acute bumps.
ROOT: The descending axis of the plant, usually growing in the opposite direction from the stem, without nodes and internodes, mostly developing underground and absorbing moisture from the soil.
ROOTLETS: Small branch-like offshoots from the root.
ROOTSTOCK: A rhizome or the elongate, unmodified subterranean off shoots of roots.
ROSETTE: A cluster of leaves or other organs in a circular formation, usually hugging the ground.
RUNNERS: A filaform or very slender stolon.
SAGITATE: Shaped like an arrow-head, the basal lobes directed downward or backward.
SAMARA: An indehiscent winged fruit.
SAP: The fluid material that flows from the roots, through certain conducting cells and into the leaves, it is usually clear but can be colored.
SCABROUS: Rough to the touch.
SCALE: Any thin scarious body, usually a degenerate leaf, sometimes of epidermal orgin, a trichome, if disc-like or flattened.
SCAPE: A naked flowering stem rising from the ground.

SEED: The ripened ovule, consisting of the embryo, stored food, and a seed coat.
SEPALS: A unit of the calyx, the outer most set of floral leaves.
SERRATE: Having sharp teeth pointing forward.
SERRULATE: Finely serrate.
SESSILE: Withouth stalk of any kind, leaves with no petioles are sessile.
SHEATHING: Inclosing or surrounding.
SHRUB: A woody perennial usually several stems.
SILICLE: A short silique.
SILIQUE: A specialized fruit or capsule in which a thin membrane separates the valves, notably in the cruciferae family.
SMOOTH: Without roughness, rather inaccurately used to signify without pubescence.
SPADIX: A spike with a fleshy axis, as in the araceae family.
SPATHE: A large bract inclosing an inflorescence, usually inclosing a spadix.
SPATULATE: Oblong, with the basal end attenuated like a druggist's spatula.
SPECKLED: Having spots or small splotches.
SPHERICAL: Round or global.
SPICY: Flavorful, aromatic.
SPIKE: A form of simple inflorescence with the flowers sessile or nearly so upon a more or less elongated common axis.
SPINES: Sharp woody or rigid outgrowths from the stem.
SPINEY: Having spines.
SPINULOSE: Having tiny spines.
SPIRAL: In a twisted circular manner, like a spring.
SPUR: A hollow sac-like or tubular extension of some part of a flower.
SPURRED: Having spurs.
STAMEN: One of the pollen-bearing organs of the flower.
STAMINATE: Having stamens.
STEM: The main ridiged growth of which the branches and leaves originate.
STIGMA: That part of a pistil which receives the pollen, fertilization of the ovules follows.
STIPE: The leaf-stalk of a fern frond.

STIPULATE: Having stipules
STIPULE: An appendage at the base of a petiole or leaf.
STOLONIFEROUS: Producing stolons.
STOLON: A runner, or any basal branch that is inclined to root.
STOUT: Broad, large.
STROBILE: An inflorescence marked by imbricated bracts or scales, as in the hop plant or pine cone.
STYLE: The usually attenuated portion of the pistil connecting the stigma and ovary.
SUBCORDATE: Slightly cordate in shape.
SUBCYLINDRIC: Slightly cylindric, tending to be cylindric in shape.
SUBERECT: Tending to be erect.
SUBGLOBOSE: Tending to be globose in shape.
SUBORBICULAR: Tending to be obicular in shape.
SUBROTOUND: Tending to be rotound in shape.
SUBSPHERICAL: Tending to be spherical in shape.
SUCCULENT: Fleshy, juicy.
TAPROOT: A primary descending root.
TERMINAL: At the end of the growing points, such as at the branch and stem tips.
TERNATE: In threes, trimerous.
THORN: Same as spine, a woody sharp appendage.
TOOTHED: Having sharp lobes, like serrate but larger.
TRAILING: With runners or stolons.
TRUNCATE: Ending abruptly, as if cut off transversly.
TUBULAR: Small cylinderic in shape, like a tube.
TWINING: Wrapping itself around, like vines wrapping around trees.
UMBEL: An inflorescence in which the peduncles or pedicels spring from the same level, shaped like an upside down umbrella.
UNDULATE: With a wavy surface or margin, repand.
UNISEXUAL: Of one sex, either staminate or pistillate.
UNITED: Joined together.
VALVE: One of the pieces into which a capsule splits, or the partially detached lid of an anther.
VALVED: Having valves.
VEIN: Threads of conducting tissue in a leaf or other organ, especially those which branch.
VILLIOUS: Bearing long and soft hairs that are not

interwoven.
VINE: A long trailing stem that is prostrate ore uses other structures or plants as supporting structures.
WHORL: An arrangement of leaves, branches or flowers in a circle around the stem.
WHORLED: Having leaves or branches arranged in a whorl.
WING: Any membranous or thin expansion bordering or surrounding an organ, such as elm seeds and maple seeds are winged.
WINGED: Having a wing.
WOOLEY: With long and tortuous or matted hairs.

GLOSSARY OF MEDICAL TERMS

ABORTIFACIENT: Causing abortion, an agent that causes abortion.
ACNE: An affection of the skin with eruption of the papules or pustules.
ADULTERANT: Foreign material mixed in with the drug plant.
ALKALOID: Any principle or organic orgin containing a nitrogen atom.
ALTERATIVE: To change gradually the nutritive process and bodily habits to a normal state.
AMENORRHEA: Absence of menstruation.
ANALGESIC: To allay pain by depressing the sensory nerve centers.
ANESTHESIA: Absence of sensitivity to stimuli, a narcosis produced by a drug for surgery.
ANODYNE: To produce relief from pain by action on the sensory nervous system.
ANTHELMINTIC: To expel or kill intestinal worms.
ANTIBIOTIC: Destructive of life, but usually it pertains to a drug that destroys bacteria.
ANTIPERIODIC: To modify or prevent return of malarial fever.
ANTISCORBUTIC: Counter acting scurvy.
ANTISEPTIC: To inhibit, check the growth of, or kill microorganisms on living tissue.
ANTISPASMODIC: Preventing or relieving spasms.
APERIENT: Mildly cathartic.
APHRODISIAC: A substance that produces sexual stimulation.
AROMATIC: Having a spicy fragrance.
ARRHYTHMIA: Variation from the normal rhythm, especially of the heart beat.
ARTHRITIS: Inflamation of the joints.
ASCORBUTIC: Containing ascorbic acid.
ASPHYXIA: Apparent or actual cessation of life due to interruption of effective gaseous exchange in the lungs.
ASTHMA: A term applied loosely to a condition of difficult breathing: Used specifically to designate a condition of bronchospasm in a patient with a family history of an allergy.
ASTRINGENT: To shrink, blanch, wrinkle or harden

tissue, diminish secretions and exudates, and coagulate blood.
BITTERS: A bitter tasting substance usually used to aid digestion.
BOILS: Furuncle, a cutaneous leishmaniasia.
BRONCHITIS: Inflamation of the bronchi, usually with profuse mucous discharge.
CANCER: A milignant tumor.
CANKER: An ulceration, especially of the lip or oral mucosa.
CARBUNCLES: A deeply situated staphylococcal infection producing multiple adjacent draining skin sinuses.
CARCINOGENIC: An agent that causes cancer.
CARDIAC: Pertaining to the heart.
CARMINATIVE: To expel gas and relieve colic.
CATARRH: Inflammation of a mucous membrane with free discharge.
CATHARTIC: Promoting defecation, an agent that promotes defecation.
CHOLAGOGUE: To stimulate emptying of the gall bladder and flow of bile into the duodenum.
CHOLERA: A condition marked by diarrhea and vomiting, asiatic cholera is an acute infectious disease, chiefly epidemic, caused by vibrio comma.
COLD: A condition of suspected viral causation, with inflammation of the nasopharynax and variable degrees of maliase.
CONDIMENT: To season or give relish to food.
CONGESTION: Abnormal accumulation of blood in a part.
CONSTIPATION: A condition of abnormally infrequent and difficult evacuation of feces.
CONSUMPTION: Wasting of the body, pulmonary tuberculosis.
CONVALESCENCE: The stage of recovering from an illness, operation or accidental injury.
CONVULSIONS: Involuntary spasm or contraction of muscles.
CORRECTIVE: To correct or render more pleasant the action of other remedies, especially purgatives.
CORYZA: Profuse discharge from the mucous membrane

of the nose.
COUNTERIRRITANT: To cause irritation of the part to which it is applied and to draw blood away from a deep seated area.
CRAMPS: A painful spasmodic muscular contraction.
CUTANEOUS: Pertaining to the skin.
DEBILITY: Weakness, a run down state.
DEMULCENT:To sooth and protect mucous membranes.
DENTIFRICE: A preparation for cleansing and polishing teeth.
DEOBSTRUENT: Removing obstructions, a medicine which removes obstructions.
DEPRESSANT: To lessen functional activity.
DERMATITIS: Inflamation of the skin.
DERMATOMYCOSIS: A skin disease due to parasitic fungi.
DETERGENT: To cleanse morbid parts, as granulating wounds and ulcers.
DIABETES: A condition characterized by inability of the tissues to utilize sugar despite the availability of biological active insulin.
DIAPHORETIC: To increase perspiration.
DIARRHEA: Frequent evacuation of watery feces.
DIPHTHERIA: An infectious disease caused by corynebacterium diphtheriae, characterized by the formation of false membranes in the throat and nose.
DISCUTIENT: To scatter swellings.
DIURETIC: To increase urine flow.
DOUCHE: A stream of water directed against a part or into a cavity, usually associated with a vaginal wash.
DROPSY: Accumulation of serous fluid in a cavity or in the tissues.
DYSENTERY: Inflammation of the large intestine, with the avacuation of liquid and bloody stools, and tenesmus.
DYSMENORRHEA: Painful menstruation.
DYSPEPSIA: Indigestion, difficulty of digestion.
DYSURIA: Painful urination.
ECZEMA: A skin disease with itching, redness and infiltration.
EMETIC: An agent that causes vomiting.
EMMENAGOGUE: To re-establish or increase menstral flow.

EMMOLLIENT: To soften and protect the skin.
EMPHYSEMA: Abnormal pressure of air or gas in body tissue, with the wasting of lung substance.
ENEMA: Introduction of fluid into the rectum.
EPILEPSY: A disorder characterized by convulsive seizures or disturbances of consciousness, or both, and associated with disturbance of electrical activity of the brain.
ERYSIPELA: A febrile disease characterized by inflammation and redness of the skin, mucous membranes, etc. and due to streptococcus pyogenes.
ESCHAROTIC: Causing lesions such as that due to a bite of an infected mite, resulting in scrub typhus, or by application of a caustic agent, a necrotic mass ultimately separating from healthy tissue and being cast off.
ESTER: The coproduct, within water, resulting from reaction of an alcohol with an acid.
EXPECTORANT: To cause expulsion of mucous from the respiratory tract.
FEBRIFUGE: A remedy that dispels fever.
FLATULENCE: Excessive formation of gases in the stomach or intestines.
FLUX: An abnormal discharge from the body.
FOMENTATION: A warm, moist application.
GALACTAGOGUE: To increase lacteal secretion.
GASTRITIS: Inflammation of the stomach.
GLAUCOMA: A condition of the eye characterized by increased intraocular pressure.
GLYCOSIDE: A vegetable principle decomposable into a carbohydrate and another substance.
GOUT: Painful constitutional disease with joint inflammation and chalky deposits, due to disturbance of the purine metabolism of the body.
HAYFEVER: An allergy from pollen causing stuffed up nose and head.
HEARTBURN: A burning sensation in the epigastrium.
HEMORRHAGE: The escape of blood from a ruptured vessel.
HEMORRHOID: A varicose dilation of a vein of the superior or inferior hemorrhoidal plexus.
HEMOSTATIC: An agent used to check or stop the

the escape of blood.
HYDROPHOBIA: Rabies.
HYPNOTIC: An agent that induces sleep.
HYPOCONDRIAC: A person with a morbid anxiety about one's own health, with complaint of imaginary disorders.
HYPOGLYCEMIC: Deficiency of sugar in the blood.
HYSTERIA: A psychoneurosis with symptoms based on conversion and characterized by lack of control over acts and emotions by morbid self-conciousness, by anxiety, by exaggeration of the effect of sensory impressions and by simulation of various disorders.
IMPOTENCE: Partial or complete inability of the male to perform the sexual act or to achieve orgasm.
INDIGESTION: Failure of digestive function, usually accompanied by stomach pains.
INDOLENT: Bad smelling.
INSOMNIA: Inability to sleep.
INTOXICANT: A substance that creates another state of reality, usually combined with difficult coordination and muscular control.
JAUNDICE: Yellowness of the skin and eyes from bile pigments.
LACTONE: An aromatic liquid from lactic acid; a cyclic ester.
LARYNGITIS: Inflammation of the larynx, sometimes causing inability to talk.
LAXATIVE: An agent that promotes evacuation of the bowels.
LECTINIC: An agent that causes hemagglutination.
LEUCORRHEA: A whitish discharge from the vagina.
MALIGNANT: Progressing in virulence.
MENORRHAGIA: Excessive menstruation.
MENSTRUATION: The cyclic, physiologic discharge of blood from the nonpregnant uterus, occuring approximately every 28 days in humans.
MISCARRIAGE: Loss of products of conception from the uterus before the fetus is viable.
MUCILAGE: An aqueous solution of a gummy substance, used as a demulcent.
NARCOTIC: To relieve distress and induce sleep.
NAUSEA: Tendency to vomit.

NEPHRITIS: Inflammation of the kidney.
NEURALGIA: Pain in the nerve.
NUTRITIVE: Aiding in nutrition.
OPHTHALMIA: Severe inflammation or affection of the eye.
PANACEA: A remedy for all diseases.
PARALYSIS: Loss of power of voluntary motion.
PARTURIFACIENT: A medicine which facilitates childbirth.
PECTORAL: Pertaining to the chest or breast, effective in diseases of the chest.
PHLEGM: Mucous.
PHYSIC: A medicine, especially a cathartic.
PILES: Hemorrhoids.
PLEURISY: Inflammation of the pleura, a lung disease.
PNEUMONIA: An acute inflammation condition of the lung marked by formation of an exudate in the interstitial and cellular portions of the lung.
POULTICE: A soft, pultaceous mass to be placed hot upon the skin.
PSORIASIS: A chronic, recurrent, papulosquamous dermatosis with silvery gray scaling papules or plaques.
PURGATIVE: A cathartic.
PYORRHEA: A purulent inflammation of the dental periosteum, with progressive necrosis of the alveoli and loosness of the teeth, a gum disease.
QUINSY: Acute suppurative inflammation of the tonsil and the surrounding tissue.
REFRIGERANT: To allay thirst and give a sensation of coolness.
RESOLVENT: Promoting the subsidence of a pathologic state.
RHEUMATISM: A disease marked by pain in the joints or muscles, usually recurrent, and often due to exposure.
RUBEFACIENT: To produce mild irritation accompanied by reddening when applied to the skin.
SALIVATION: The secretion of saliva.
SAPONIN: A glycosidal principle from various plants which characteristically foams when shaken in water.
SCROFULA: Tuberculosis disease of lymphatic nodes and of bone, with slowly suppurating abscesses.
SCURVY: A disease due to deficiency of ascorbic acid,

marked by weakness, anemia, spongy gums and mucocutaneous hemorrhages.

SEDATIVE: To allay excitement and soothe the system.

SIALAGOGUE: An agent that stimulates the flow of saliva.

SMALLPOX: An acute, highly communicable, febrile viral disease, characterized by sustained high fever and appearance first of macules and later of papules on the skin and mucous membranes.

SPASMODIC: Of the nature of spasms, an agent that causes spasms.

SPERMATORRHEA: Involuntary escape of semen.

STERNUTATORY: An agent that causes sneezing.

STIMULANT: To increase functional activity.

STOMACHIC: To stimulate appetite and gastric secretion.

STYPTIC: Arresting hemorrhage by the means of an astringent quality.

SUDORIFIC: An agent that causes perspiration.

SYPHILIS: A veneral disease caused by treponema pallidum, leading to many structural and cutaneous lesions.

TAENIFUGE: To expel tapeworms.

THRUSH: Infection of the oral mucous membrane by candida albicans, characterized by superficial, confluent white patches on a red, moist, inflammatory surface.

TONIC: To stimulate restoration of tone to muscle tissue.

TREMOR: Involuntary movement due to alternating contractions of opposing muscles, occuring physiologically or pathologically.

TUBERCULOSIS: An infectious disease caused by mycobacterium tuberculosis, and characterized by the formation of tubercules in the tissues.

ULCER: A local defect, or excavation of the surface of an organ, produced by sloughing of necrotic inflammatory tissue.

VAGINITIS: Inflammation of the vagina.

VASOPRESSOR: An agent that stimulants contraction of the muscular tissue of capillaries and arteries.

VERMIFUGE: An agent that expels worms.

VESICANT: An agent that produces blisters.

VULNERARY: An agent that promotes the healing of wounds.

CROSS INDEX TABLES

With all the information available in this book it is very difficult to extract the information one is looking for. For this reason, a computer program was designed to create seasonal tables from keywords and habitat information.

Now, the tables thus created do not mean that the specified plants are a sure cure for the symptoms, diseases, or properties described, it just means that at one time or another, the plants included have been used for the specified phenomena according to the literature or first hand information.

It is advised that if one wishes to experiment with plants, use the greatest caution and the understanding that many plants have lethal side effects. Is also recommended to do extensive research on the specified plants and effects that one is working with.

The tables are broken up into 16 groups. There are a maximum of 4 tables per subgroup, the 4 tables being one for each of the seasons. Each table is subdivided into three habitats; (1) forests, (2) fields and (3) streams and wet areas. The 16 tables are as follows:

Section 1: Nervous system.
Section 2: Circulatory system.
Section 3: Respiratory system.
Section 4: Digestive system.
Section 5: Urinary system.
Section 6: Skin problems.
Section 7: Wounds.
Section 8: Insect repellants and bites.
Section 9: Diseases of women.
Section 10: Eye problems.
Section 11: Ear problems
Section 12: Diseases of the joints.
Section 13: Dyes
Section 14: Plant parts and season collected.
Section 15: Theraputical terms.
Section 16: Edible Plants.

1. NERVOUS SYSTEM

1. 1. HEADACHES (NERVOUS)

Table 1-1. HEADACHES (Nervous) SPRING

Forests	
Cypripedium calceolus.	*Scutellaria lateriflora.*
Pinus strobus.	
Fields and open areas	
Capsella bursa-pastoris.	*Scutellaria lateriflora.*
Streams and wet areas	
Cypripedium calceolus	*Scutellaria lateriflora.*
Salix spp.	*Symplocarpus foetidus.*

Table 1-2. HEADACHES (Nervous) SUMMER

Forests	
Aquilegia canadensis.	*Pinus strobus.*
Hedeoma pulegioides.	*Scutellaria lateriflora.*
Monarda fistulosa.	
Fields and open areas	
Achillea spp.	*Scutellaria lateriflora.*
Capsella bursa-pastoris.	*Tanacetum vulgare.*
Monarda fistulosa.	*Verbascum thapsus.*
Nepeta cataria.	
Streams and wet areas	
Aquilegia canadensis.	*Symplocarpus foetidus.*
Scutellaria lateriflora.	

Table 1-3. HEADACHES (Nervous) FALL

Forests	
Apocynum spp.	*Monarda fistulosa*
Arctostaphylos uva-ursi	*Panax quinquefolius*
Cypripedium calceolus	*Pinus strobus*
Gaultheria procumbens	
Fields and open areas	
Achillea spp.	*Gaultheria procumbens*
Apocynum spp.	*Monarda fistulosa*
Arctostaphylos uva-ursi	*Tanacetum vulgare*
Capsella bursa-pastoris	*Verbascum thapsus*
Streams and wet areas	
Cypripedium calceolus	*Symplocarpus foetidus*

Table 1-4. HEADACHES (Nervous) WINTER

Forests
Pinus strobus
Fields and open areas
None
Streams and wet areas
None

1-2. NEURALGIA (NERVOUSNESS)

Table 1-5. NEURALGIA, (Nervous) SPRING

Forests	
Aesculus hippocastanum	*Heracleum lanatum*
Cypripedium calceolus	*Scutellaria lateriflora*
Dicentra spp.	
Fields and open areas	
Heracleum lanatum	*Scutellaria lateriflora*
Streams and wet areas	
Cypripedium calceolus	*Scutellaria lateriflora*
Heracleum lanatum	

Table 1-6. NEURALGIA, NERVOUSNESS SUMMER

Forests	
Aesculus hippocastanum.	*Scutellaria lateriflora.*
Heracleum lanatum.	
Fields and open areas	
Daucus carota.	*Nepeta cataria.*
Heracleum lanatum.	*Scutellaria lateriflora.*
Leonurus cardiaca.	
Streams and wet areas	
Heracleum lanatum.	*Scutellaria lateriflora.*

Table 1-7. NEURALGIA, NERVOUSNESS FALL

Forests	
Aesculus hippocastanum.	*Heracleum lanatum.*
Cypripedium calceolus.	*Panax quinquefolius.*
Dicentra spp.	
Fields and open areas	
Cannabis sativa.	*Humulus lupulus.*
Daucus carota.	*Leonurus cardiaca.*
Heracleum lanatum.	
Streams and wet areas	
Cypripedium calceolus.	*Heracleum lanatum.*

Table 1-8. NEURALGIA, NERVOUSNESS WINTER

Forests	
Aesculus hippocastanum.	*Heracleum lanatum.*
Fields and open areas	
Heracleum lanatum.	
Streams and wet areas	
Heracleum lanatum.	

1. 3. CONVULSIONS, NERVOUS DISEASES

Table 1-9.
CONVULSTIONS, NERVOUS DISEASES SPRING

Forests	
Abies balsamea.	*Heracleum lanatum.*
Cypripedium calceolus.	*Scutellaria lateriflora.*
Dicentra spp.	*Viburnam opulus.*
Fields and open areas	
Heracleum lanatum.	*Scutellaria lateriflora.*
Streams and wet areas	
Cypripedium calceolus.	*Symplocarpus foetidus.*
Heracleum lanatum.	*Thuja occidentalis.*
Scutellaria lateriflora.	

Table 1-10.
CONVULSIONS, NERVOUS DISEASES SUMMER

Forests	
Abies balsamea.	*Monotropa uniflora.*
Heracleum lanatum.	*Scutellaria lateriflora.*
Lobelia inflata.	*Viburnam opulus.*
Fields and open areas	
Artemesia absinthium.	*Scutellaria lateriflora.*
Heracleum lanatum.	*Tanacetum vulgare.*
Lobelia inflata.	
Streams and wet areas	
Heracleum lanatum.	*Symplocarpus foetidus.*
Scutellaria lateriflora.	*Thuja occidentalis.*

Table 1-11.
CONVULSIONS, NERVOUS DISEASES FALL

Forests	
Abies balsamea.	*Heracleum lanatum.*
Cypripedium calceolus.	*Viburnam opulus.*
Dicentra spp.	
Fields and open areas	
Artemisia absinthium.	*Tanacetum vulgare.*
Heracleum lanatum.	
Streams and wet areas	
Cypripedium calceolus.	*Symplocarpus foetidus.*
Heracleum lanatum.	*Thuja occidentalis.*

Table 1-12.
CONVULSIONS, NERVOUS DISEASES WINTER

Forests	
Abies balsamea.	*Viburnam opulus.*
Heracleum lanatum.	
Fields and open areas	
Heracleum lanatum.	
Streams and wet areas	
Heracleum lanatum.	*Thuja occidentalis.*

2. CIRCULATORY SYSTEM

2. 1. HEART PROBLEMS

Table 2-1. HEART PROBLEMS SPRING

Forests	
Populus balsamifera.	
Fields and open areas	
Geum rivale.	*Taraxacum officinale.*
Marrubium vulgare.	
Streams and wet areas	
Geum rivale.	*Populus balsamifera.*
Nasturtium officinale.	

Table 2-2. HEART PROBLEMS SUMMER

Forests	
Ceanothus americanus.	*Trillium erectum.*
Populus balsamifera.	
Fields and open areas	
Ceanothus americanus.	*Lactuca scariola.*
Cynoglossum officinale.	*Leonurus cardiaca.*
Geum rivale.	*Taraxacum officinale.*
Helianthus annuus.	*Verbascum thapsus.*
Streams and wet areas	
Geum rivale.	*Populus balsamifera.*
Nasturtium officinale.	

Table 2-3. HEART PROBLEMS FALL

Forests	
Apocynum spp.	*Populus balsamifera.*
Ceanothus americanus.	*Solanum dulcamara.*
Panax quinquefolius.	*Trillium erectum.*
Polygonatum biflorum.	
Fields and open areas	
Apocynum spp.	*Helianthus annuus.*
Asclepias tuberosa.	*Lactuca scariola.*
Ceanothus americanus.	*Leonurus cardiaca.*
Cynoglossum officinale.	*Polygala senega.*
Erigeron canadensis.	*Taraxacum officinale.*
Geum rivale.	*Verbascum thapsus.*
Streams and wet areas	
Asarum canadense.	*Nasturtium officinale.*
Geum rivale.	*Populus balsamifera.*

Table 2-4. HEART PROBLEMS WINTER

Forests	
Populus balsamifera.	
Fields and open areas	
Geum rivale.	*Taraxacum officinale.*
Streams and wet areas	
Geum rivale.	*Populus balsamifera.*
Nasturtium officinale.	

2.2. HEMORRHAGING (BLEEDING)

3. RESPIRATORY SYSTEM

3. 1. COLDS AND FLUS

Table 3-1. COLDS AND FLUS SPRING

Forests	
Abies balsamea.	*Pinus strobus.*
Chimaphila umbellata.	*Populus balsamifera.*
Fraxinus americana.	*Prunus serotina.*
Fields and open areas	
Juniperus communis.	*Marrubium vulgare.*
Streams and wet areas	
Acorus calamus.	*Nasturtium officinale.*
Mentha piperita.	*Populus balsamifera.*

Table 3-2. COLDS AND FLUS SUMMER

Forests	
Abies balsamea.	*Pinus strobus.*
Chimaphila umbellata.	*Populus balsamifera.*
Fraxinus americana.	*Prunus serotina.*
Monarda fistulosa.	
Fields and open areas	
Achillea spp.	*Juniperus communis.*
Cynoglossum officinale.	*Monarda fistulosa.*
Helianthus annuus.	*Nepeta cataria.*
Streams and wet areas	
Eupatorium perfoliatum.	*Nasturtium officinale.*
Mentha piperita.	*Populus balsamifera.*

Table 3-3. COLDS AND FLUS FALL

Forests	
Abies balsamea.	*Monarda fistulosa.*
Apocynum spp.	*Pinus strobus.*
Chimaphila umbellata.	*Populus balsamifera.*
Fraxinus americana.	*Prunus serotina.*
Fields and open areas	
Achillea spp.	*Helianthus annuus.*
Apocynum spp.	*Juniperus communis.*
Cynoglossum officinale.	*Monarda fistulosa.*
Erigeron canadensis.	*Polygala senega.*
Streams and wet areas	
Acorus calamus.	*Nasturtium officinale.*
Eupatorium perfoliatum.	*Populus balsamifera.*
Mentha piperita.	

Table 3-4. COLDS AND FLUS WINTER

Forests	
Abies balsamea.	*Populus balsamifera.*
Pinus strobus.	*Prunus serotina.*
Fields and open areas	
Juniperus communis.	
Streams and wet areas	
Nasturtium officinale.	*Populus balsamifera.*

3.2. COUGHING

Table 3-5. COUGHING SPRING

Forests	
Abies balsamea.	*Pinus strobus.*
Adiantum spp.	*Prunus serotina.*
Erythronium americanum.	*Sassafras albidum.*
Hepatica acutiloba.	
Fields and open areas	
Marrubium vulgare.	
Streams and wet areas	
Acorus calamus.	*Symplocarpus foetidus.*
Mentha spicata.	*Thuja occidentalis.*

Table 3-6. COUGHING — SUMMER

Forests

Abies balsamea.
Adiantum spp.
Aralia spp.
Ceanothus americanus.
Lobelia inflata.
Pinus strobus.
Prunus serotina.

Fields and open areas

Aralia spp.
Arctium spp.
Ceanothus americanus.
Cynoglossum officinale.
Helianthus annuus.
Lactuca scariola.
Lobelia inflata.
Trifolium pratense.
Verbascum thapsus.

Streams and wet areas

Eupatorium perfoliatum.
Lycopus virginicus.
Mentha spicata.
Symplocarpus foetidus.
Thuja occidentalis.

Table 3-7. COUGHING — FALL

Forests

Abies balsamea.
Adiantum spp.
Aralia spp.
Arisaema triphyllum.
Ceanothus americanus.
Chamaelirium lutem.
Erythronium americanum.
Pinus strobus.
Prunus serotina.

Fields and open areas

Aralia spp.
Arctium spp.
Ceanothus americanus.
Cynoglossum officinale.
Helianthus annuus.
Lactuca scariola.
Polygala senega.
Trifolium pratense.
Verbascum thapsus.

Streams and wet areas

Acorus calamus.
Arisamea triphyllum.
Chamaelirium lutem.
Eupatorium perfoliatum.
Lycopus virginicus.
Mentha spicata.
Symplocarpus foetidus.
Thuja occidentalis.

Table 3-8. COUGHING WINTER

Forests	
Abies balsamea.	*Prunus serotina.*
Pinus strobus.	
Fields and open areas	
None	
Streams and wet areas	
Thuja occidentalis.	

3.3. CONSUMPTION AND CONGESTION

Table 3-9.
CONSUMPTION AND CONGESTION SPRING

Forests	
Abies balsamea.	*Populus balsamifera.*
Adiantum spp.	*Prunus serotina.*
Pinus strobus.	
Fields and open areas	
Cichorium intybus.	*Marrubium vulgare.*
Juniperus communis.	
Streams and wet areas	
Acorus calamus.	*Symplocarpus foetidus.*
Populus balsamifera.	*Thuja occidentalis.*

Table 3-10.
CONSUMPTION AND CONGESTION SUMMER

Forests	
Abies balsamea.	*Pinus strobus.*
Adiantum spp.	*Populus balsamifera.*
Hydrastis canadensis.	*Prunus serotina.*
Monarda fistulosa.	
Fields and open areas	
Achillea spp.	*Monarda fistulosa.*
Cynoglossum officinale.	*Verbascum thapsus.*
Juniperus communis.	
Streams and wet areas	
Eupatorium perfoliatum.	*Symplocarpus foetidus.*
Lycopus virginicus.	*Thuja occidentalis.*
Populus balsamifera.	

Table 3-11.
CONSUMPTION AND CONGESTION FALL

Forests	
Abies balsamea.	*Panax quinquefolius.*
Adiantum spp.	*Pinus strobus.*
Arisaema triphyllum.	*Populus balsamifera.*
Hydrastis canadensis.	*Prunus serotina.*
Monarda fistulosa.	
Fields and open areas	
Achillea spp.	*Monarda fistulosa.*
Cichorium intybus.	*Polygala senega.*
Cynoglossum officinale.	*Verbascum thapsus.*
Juniperus communis.	
Streams and wet areas	
Acorus calamus.	*Populus balsamifera.*
Arisaema triphyllum.	*Symplocarpus foetidus.*
Eupatorium perfoliatum.	*Thuja occidentalis.*
Lycopus virginicus.	

Table 3-12
CONSUMPTION AND CONGESTION WINTER

Forests	
Abies balsamea	*Populus balsamifera*
Pinus strobus	*Prunus serotina*
Fields and open areas	
Juniperus communis	
Streams and wet areas	
Populus balsamifera	*Thuja occidentalis*

3.4. BRONCHITIS

Table 3-13. BRONCHITIS SPRING

Forests	
Populus balsamifera	*Sanguinaria canadensis*
Fields and open areas	
None	
Streams and wet areas	
Populus balsamifera	

Table 3-14. BRONCHITIS SUMMER

Forests	
Angelica atropurpurea	*Lobelia inflata*
Ceanothus americanus	*Populus balsamifera*
Fields and open areas	
Ceanothus americanus	*Lobelia inflata*
Streams and wet areas	
Angelica atropurpurea	*Populus balsamifera*

Table 3-15. BRONCHITIS FALL

Forests	
Angelica atropurpurea.	*Ceanothus americanus.*
Arctostaphylos uva-ursi.	*Populus balsamifera.*
Arisaema triphyllum.	
Fields and open areas	
Arctostaphylos uva-ursi.	*Polygala senega.*
Ceanothus americanus.	
Streams and wet areas	
Angelica atropurpurea.	*Caulophyllum thalictroides.*
Arisaema triphyllum.	*Populus balsamifera.*

Table 3-16. BRONCHITIS WINTER

Forests
Populus balsamifera.
Fields and open areas
None
Streams and wet areas
Populus balsamifera.

3.4. ASTHMA

Table 3-17. ASTHMA SPRING

Forests	
Abies balsamea.	*Viburnam opulus.*
Sanguinaria canadensis.	
Fields and open areas	
Marrubium vulgare.	*Rhus spp.*
Streams and wet areas	
Nasturtium officinale.	*Symplocarpus foetidus.*

Table 3-18. ASTHMA — SUMMER

Forests	
Abies balsamea	*Lobelia inflata*
Ceanothus americanus	*Viburnam opulus*
Fields and open areas	
Asclepias syriaca	*Lobelia inflata*
Ceanothus americanus	*Rhus spp*
Leonurus cardiaca	*Verbascum thapsus*
Streams and wet areas	
Nasturtium officinale	*Symplocarpus foetidus*

Table 3-19. ASTHMA — FALL

Forests	
Abies balsamea	*Ceanothus americanus*
Arisaema triphyllum	*Viburnam opulus*
Fields and open areas	
Asclepias syriaca	*Polygala senega*
Ceanothus americanus	*Rhus spp*
Leonurus cardiaca	*Verbascum thapsus*
Streams and wet areas	
Arisaema triphyllum	*Symplocarpus foetidus*
Nasturtium officinale	

Table 3-20. ASTHMA — WINTER

Forests	
Abies balsamea	*Viburnam opulus*
Fields and open areas	
None	
Streams and wet areas	
Nasturtium officinale	

4. DIGESTIVE SYSTEM

4. 1. SORE MOUTH AND CANKER SORES

Table 4-1.
SORE MOUTH AND CANKER SORES SPRING

Forests	
Coptis groenlandica.	*Juglans nigra.*
Geranium maculatum.	*Prunella vulgaris.*
Hamamelis virginiana.	*Pyrola routundifolia.*
Hepatica acutiloba.	*Sanguinaria canadensis.*
Heracleum lanatum.	
Fields and open areas	
Fragaria virginiana.	*Prunella vulgaris.*
Geranium maculatum.	*Rhus spp.*
Geum rivale.	*Rubus spp.*
Heracleum lanatum.	
Streams and wet areas	
Coptis groenlandica.	*Pyrola routundifolia.*
Geum rivale.	*Symplocarpus foetidus.*
Heracleum lanatum.	

Table 4-2.
SORE MOUTH AND CANKER SORES SUMMER

Forests	
Aquilegia canadensis.	*Hydrastis canadensis.*
Ceanothus americanus.	*Juglans nigra.*
Coptis groenlandica.	*Prunella vulgaris.*
Heracleum lanatum.	*Pyrola routundifolia.*
Fields and open areas	
Ceanothus americanus	*Prunella vulgaris.*
Fragaria virginiana.	*Rhus spp.*
Geum rivale.	*Rubus spp.*
Heracleum lanatum.	*Tanacetum vulgare.*
Streams and wet areas	
Aquilegia canadensis.	*Heracleum lanatum.*
Coptis groenlandica.	*Pyrola routundifolia.*
Geum rivale.	*Symplocarpus foetidus.*

Table 4-3.
SORE MOUTH AND CANKER SORES FALL

Forests	
Ceanothus americanus.	*Hydrastis canadensis.*
Coptis groenlandica.	*Juglans nigra.*
Geranium maculatum.	*Prunella vulgaris.*
Hamamelis virginiana.	*Pyrola routundifolia.*
Heracleum lanatum.	
Fields and open areas	
Baptisia tinctoria.	*Heracleum lanatum.*
Ceanothus americanus.	*Prunella vulgaris.*
Fragaria virginiana.	*Rhus spp.*
Geranium maculatum.	*Rubus spp.*
Geum rivale.	*Tanacetum vulgare.*
Streams and wet areas	
Coptis groenlandica.	*Pyrola routundifolia.*
Geum rivale.	*Symplocarpus foetidus.*
Heracleum lanatum.	

Table 4-4
SORE MOUTH AND CANKER SORES WINTER

Forests	
Heracleum lanatum.	
Fields and open areas	
Geum rivale.	*Heracleum lanatum.*
Streams and wet areas	
Geum rivale.	*Heracleum lanatum.*

4.2. TEETH AND TOOTHACHES

Table 4-5. TEETH AND TOOTHACHES SPRING

Forests

Coptis groenlandica.
Cypripedium calceolus.
Heracleum lanatum.
Sassafras albidum.

Fields and open areas

Fragaria virginiana.
Heracleum lanatum.
Rhus spp.
Rubus spp.

Streams and wet areas

Acorus calamus.
Coptis groenlandica.
Cypripedium calceolus.
Heracleum lanatum.
Mentha piperta.
Mentha spicata.
Symplocarpus foetidus.

Table 4-6. TEETH AND TOOTHACHES SUMMER

Forests

Coptis groenlandica.
Heracleum lanatum.

Fields and open areas

Achillea spp.
Comptonia peregrina.
Fragaria virginiana.
Heracleum lanatum.
Nepeta cataria.
Rhus spp.
Rubus spp.
Rumex crispus.

Streams and wet areas

Coptis groenlandica.
Heracleum lanatum.
Mentha piperita.
Mentha spicata.
Symplocarpus foetidus.

Table 4-7. TEETH AND TOOTHACHES FALL

Forests	
Coptis groenlandica.	*Gaultheria procumbens.*
Cypripedium calceolus.	*Heracleum lanatum.*
Fields and open areas	
Achillea spp.	*Humulus lupulus.*
Comptonia peregrina.	*Rhus spp.*
Fragaria virginiana.	*Rubus spp.*
Gaultheria procumbens.	*Rumex crispus.*
Heracleum lanatum.	
Streams and wet areas	
Acorus calamus.	*Mentha piperita.*
Coptis groenlandica.	*Mentha spicata.*
Cypripedium calceolus.	*Symplocarpus foetidus.*
Heracleum lanatum.	

Table 4-8. TEETH AND TOOTHACHES WINTER

Forests
Heracleum lanatum.
Fields and open areas
Heracleum lanatum.
Streams and wet areas
Heracleum lanatum.

4.3. INDIGESTION AND COLIC

Table 4-9. INDIGESTION AND COLIC SPRING

Forests

Abies balsamea.
Actaea spp.
Chimaphila umbellata.
Coptis groenlandica.
Heracleum lanatum.
Sanguinaria canadensis.

Fields and open areas

Betula allenghaniensis.
Cichorium intybus.
Geum rivale.
Heracleum lanatum.
Juniperus communis.
Marrubium vulgare.
Taraxacum officinale.

Streams and wet areas

Acorus calamus.
Chelone glabra.
Coptis groenlandica.
Geum rivale.
Heracleum lanatum.
Mentha piperita.
Mentha spicata.
Salix spp.
Sarracenia purpurea.

Table 4-10. INDIGESTION AND COLIC SUMMER

Forests

Abies balsamea.
Actaea spp.
Angelica atropurpurea.
Chimaphila umbellata.
Coptis groenlandica.
Hedeoma pulegioides.
Heracleum lanatum.
Monarda fistulosa.

Fields and open areas

Achillea spp.
Arctium spp.
Artemisia absinthium.
Betula allenghaniensis.
Comptonia peregrina.
Daucus carota.
Geum rivale.
Heracleum lanatum.
Juniperus communis.
Lactuca scariola.
Matricaria matricarioides.
Monarda fistulosa.
Nepeta cataria.
Taraxacum officinale.

Streams and wet areas

Angelica atropurpurea.
Chelone glabra.
Coptis groenlandica.
Eupatorium perfoliatum.
Geum rivale.
Heracleum lanatum.
Mentha piperita.
Mentha spicata.
Sarracenia purpurea.

Forests

Abies balsamea.
Actaea spp.
Aletris farinosa.
Angelica atropurpurea.
Arisaema triphyllum.
Chimaphila umbellata.
Coptis groenlandica.
Gaultheria procumbens.
Heracleum lanatum.
Menispermum canadense.
Monarda fistulosa.
Panax quinquefolius.
Solanum dulcamara.

Fields and open areas

Achillea spp.
Arctium spp.
Artemesia absinthium.
Berberis vulgaris.
Betula allenghaniensis.
Cichorium intybus.
Comptonia peregrina.
Daucus carota.
Erigeron canadensis.
Gaultheria procumbens.
Geum rivale.
Heracleum lanatum.
Juniperus communis.
Lactuca scariola.
Matricaria matricariodes.
Monarda fistulosa.
Taraxacum officinale.

Streams and wet areas

Acorus calamus.
Angelica atropurpurea.
Arisaema triphyllum.
Asarum canadense.
Caulophyllum thalictroides.
Chelone glabra.
Coptis groenlandica.
Eupatorium perfoliatum.
Geum rivale.
Heracleum lanatum.
Mentha piperita.
Mentha spicata.
Sarracenia purpurea.

Table 4-12. INDIGESTION AND COLIC WINTER

Forests	
Abies balsamea.	*Heracleum lanatum.*
Actaea spp.	
Fields and open areas	
Betula allenghaniensis.	*Juniperus communis.*
Geum rivale.	*Taraxacum officinale.*
Heracleum lanatum.	
Streams and wet areas	
Geum rivale.	*Heracleum lanatum.*

4.4. STOMACH CRAMPS

Table 4-13. STOMACH CRAMPS SPRING

Forests	
Heracleum lanatum.	*Viburnam opulus.*
Fields and open areas	
Capsella bursa-pastoris.	*Marrubium vulgare.*
Heracleum lanatum.	
Streams and wet areas	
Alnus rugosa.	*Typha latifolia.*
Heracleum lanatum.	

Table 4-14. STOMACH CRAMPS SUMMER

Forests	
Heracleum lanatum.	*Viburnam opulus.*
Trillium erectum.	
Fields and open areas	
Capsella bursa-pastoris.	*Leonurus cardiaca.*
Heracleum lanatum.	
Streams and wet areas	
Alnus rugosa.	*Typha latifolia.*
Heracleum lanatum.	

Table 4-15. STOMACH CRAMPS FALL

Forests	
Heracleum lanatum.	*Trillium erectum.*
Panax quinquefolius.	*Viburnam opulus.*
Fields and open areas	
Capsella bursa-pastoris.	*Leonurus cardiaca.*
Heracleum lanatum.	
Streams and wet areas	
Alnus rugosa.	*Heracleum lanatum.*
Asarum canadense.	*Typha latifolia.*

Table 4-16. STOMACH CRAMPS WINTER

Forests	
Heracleum lanatum.	*Viburnam opulus.*
Fields and open areas	
Heracleum lanatum.	
Streams and wet areas	
Alnus rugosa.	*Typha latifolia.*
Heracleum lanatum.	

5. URINARY SYSTEM

5.1. STONES AND GRAVEL

Table 5-1. STONES AND GRAVEL SPRING

Forests	
Pinus strobus.	*Sassafras albidum.*
Fields and open areas	
Juniperus communis.	
Streams and wet areas	
Galium aparine.	

Table 5-2. STONES AND GRAVEL SUMMER

Forests	
Pinus strobus.	
Fields and open areas	
Achillea spp.	*Daucus carota.*
Anaphalis margaritacea.	*Juniperus communis.*
Streams and wet areas	
Eupatorium purpureum.	*Galium aparine.*

Table 5-3. STONES AND GRAVEL FALL

Forests	
Pinus strobus.	
Fields and open areas	
Achillea spp.	*Juniperus communis.*
Daucus carota.	
Streams and wet areas	
Eupatorium purpureum.	

Table 5-4. STONES AND GRAVEL WINTER

Forests
Pinus strobus.
Fields and open areas
Juniperus communis.
Streams and wet areas
None

5. 2. URINARY INFECTIONS

Table 5-5. URINARY INFECTIONS SPRING

Forests	
Abies balsamea.	*Pinus strobus.*
Chimaphila umbellata.	*Sassafras albidum.*
Fields and open areas	
Capsella bursa-pastoris.	*Juniperus communis.*
Cichorium intybus.	
Streams and wet areas	
Galium aparine.	*Nasturtium officinale.*

Table 5-6. URINARY INFECTIONS SUMMER

Forests	
Abies balsamea.	*Pinus strobus.*
Chimaphila umbellata.	
Fields and open areas	
Asclepias syriaca.	*Daucus carota.*
Capsella bursa-pastoris.	*Juniperus communis.*
Streams and wet areas	
Eupatorium purpureum.	*Nasturtium officinale.*
Galium aparine.	

Table 5-7. URINARY INFECTIONS FALL

Forests	
Abies balsamea.	*Chamaelirium luteum.*
Apocynum spp.	*Chimaphila umbellata.*
Arctostaphylos uva-ursi.	*Pinus strobus.*
Fields and open areas	
Apocynum spp.	*Cichorium intybus.*
Arctostaphylos uva-ursi.	*Daucus carota.*
Ascelepias syriaca.	*Juniperus communis.*
Capsella bursa-pastoris.	
Streams and wet areas	
Chamaelirium luteum.	*Nasturtium officinale.*
Eupatorium purpureum.	

Table 5-8. URINARY INFECTIONS WINTER

Forests	
Abies balsamea.	*Pinus strobus.*
Fields and open areas	
Juniperus communis.	
Streams and wet areas	
Nasturtium officinale.	

5. 3. VENERAL DISEASES

Table 5-9. VENERAL DISEASES SPRING

Forests	
Dicentra spp.	
Fields and open areas	
None	
Streams and wet areas	
Alnus rugosa.	

Table 5-10. VENERAL DISEASES SUMMER

Forests	
Ceanothus americanus.	
Fields and open areas	
Arctium spp.	*Ceanothus americanus.*
Asclepias syriaca.	
Streams and wet areas	
Alnus rugosa.	

Table 5-11. VENERAL DISEASES FALL

Forests	
Ceanothus americanus.	*Dicentra spp.*
Fields and open areas	
Arctium spp.	*Ceanothus americanus.*
Asclepias syriaca.	
Streams and wet areas	
Alnus rugosa.	

Table 5-12. VENERAL DISEASES WINTER

Forests
None
Fields and open areas
None
Streams and wet areas
Alnus rugosa.

6. SKIN PROBLEMS

6. 1. SKIN DISEASES

Table 6-1. SKIN DISEASES SPRING

Forests	
Chimaphila umbellata.	*Sanguinaria canadensis.*
Dicentra spp.	*Scrophularia marilandica.*
Juglans nigra.	
Fields and open areas	
None	
Streams and wet areas	
Chelone glabra.	*Salix spp.*
Galium aparine.	

Table 6-2. SKIN DISEASES SUMMER

Forests	
Chimaphila umbellata.	*Juglans nigra.*
Hydrastis canadensis.	*Scrophularia marilandica.*
Fields and open areas	
Achillea spp.	*Rumex crispus.*
Streams and wet areas	
Chelone glabra.	*Galium aparine.*

Table 6-3. SKIN DISEASES FALL

Forests	
Chimaphila umbellata.	*Juglans nigra.*
Dicentra spp.	*Menispermum canadense.*
Hydrastis canadensis.	*Solanum dulcamara.*
Fields and open areas	
Achillea spp.	*Rumex crispus.*
Streams and wet areas	
Chelone glabra.	

6. 2. SKIN SORES

Table 6-4. SKIN SORES SPRING

Forests

Abies balsamea.
Actaea spp.
Adiantum spp.
Aesculus hippocastanum.
Allium tricoccum.
Anemone canadensis.
Chimaphila umbellata.
Coptis groenlandica.
Fagus spp.
Fraxinus americana.
Geranium maculatum.
Hamamelis virginiana.
Heracleum lanatum.
Juglans cinerea.
Juglans nigra.
Pinus strobus.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Sanguinaria canadensis.
Sassafras albidum.

Fields and open areas

Cichorium intybus.
Fragaria virginiana.
Geranium maculatum.
Geum rivale.
Heracleum lanatum.
Marrubium vulgare.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Taraxacum officinale.

Streams and wet areas

Alnus rugosa.
Anemone canadensis.
Coptis groenlandica.
Geum rivale.
Heracleum lanatum.
Juglans cinera.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Symplocarpus foetidus.
Thuja occidentalis.

Table 6-5. SKIN SORES SUMMER

Forests

Abies balsamea.
Actaea spp.
Adiantum spp.
Aesculus hippocastanum.
Aquilegia canadensis.
Aralia spp.
Ceanothus americanus.
Chimaphila umbellata.
Coptis groenlandica.
Fagus spp.
Fraxinus americana.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Lobelia inflata.
Monarda fistulosa.
Monotropa uniflora.
Osmorhiza longistylis.
Pinus strobus.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Trillium erectum.

Fields and open areas

Achillea spp.
Aralia spp.
Artemesia absinthium.
Ceanothus americanus.
Comptonia peregrina.
Cynoglossum officinale.
Daucus carota.
Fragaria virginiana.
Geum rivale.
Heracleum lanatum.
Lactuca scariola.
Leonurus cardiaca.
Lobelia inflata.
Matricaria matricarioides.
Monarda fistulosa.
Plantago major.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Tanacetum officinale.
Taraxacum officinale.
Trifolium pratense.
Verbascum thapsus.

Streams and wet areas

Alnus rugosa.
Aquilegia canadensis.
Coptis groenlandica.
Eupatorium perfoliatum.
Geum rivale.
Heracleum lanatum.
Juglans cinerea.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Symplocarpus foetidus.
Thuja occidentalis.

Forests

Abies balsamea.
Actaea spp.
Adiantum spp.
Aesculus hippocastanum.
Aletris farinosa.
Aralia spp.
Arisaema triphyllum.
Ceanothus americanus.
Chimaphila umbellata.
Coptis groenlandica.
Fagus spp.
Fraxinus americana.
Gaultheria procumbens.
Geranium maculatum.
Hamamelis virginiana.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Mitchella repens.
Monarda fistulosa.
Osmorhiza longistylis.
Pinus strobus.
Polygonatum biflorum.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Solanum dulcamara.
Trillium erectum.

Fields and open areas

Achillea spp.
Aralia spp.
Artemisia absinthium.
Asclepias tuberosa.
Baptisia tinctoria.
Ceanothus americanus.
Celastrus scandens.
Cichorium intybus.
Comptonia peregrina.
Cynoglossum officinale.
Daucus carota.
Fragaria virginiana.
Gaultheria procumbens.
Geranium maculatum.
Geum rivale.
Heracleum lanatum.
Lactuca scariola.
Leonurus cardiaca.
Matricaria matricarioides.
Monarda fistulosa.
Plantago major.
Polygala senega.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Tanacetum vulgare.
Taraxacum officinale.
Trifolium pratense.
Verbascum thapsus.

Streams and wet areas

Alnus rugosa.
Arisamea triphyllum.
Asarum canadense.
Coptis groenlandica.
Eupatorium perfoliatum.
Geum rivale.
Heracleum lanatum.
Iris versicolor.
Juglans cinerea.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Symplocarpus foetidus.
Thuja occidentalis.

Table 6-7. SKIN SORES WINTER

Forests

Abies balsamea.
Actaea spp.
Aesculus hippocastanum.
Fagus spp.
Heracleum lanatum.
Juglans cinerea.
Pinus strobus.
Populus balsamifera.
Prunus serotina.

Fields and open areas

Geum rivale.
Heracleum lanatum.
Taraxacum officinale.

Streams and wet areas

Alnus rugosa.
Geum rivale.
Heracleum lanatum.
Juglans cinerea.
Nasturtium officinale.
Populus balsamifera.
Thuja occidentalis.

6.3. GENERAL SKIN PROBLEMS

Table 6-8. GENERAL SKIN PROBLEMS SPRING

Forests

Abies balsamea.
Adiantum spp.
Aesculus hippocastanum.
Allium tricoccum.
Chimaphila umbellata.
Dicentra spp.
Fraxinus americana.
Heracleum lanatum.
Juglans cinerea.
Juglans nigra.
Pinus strobus.
Populus balsamifera.
Prunus serotina.
Pyrola routundifolia.
Sanguinaria canadensis.
Scrophularia marilandica.

Fields and open areas

Heracleum lanatum.

Streams and wet areas

Alnus rugosa.
Chelone glabra.
Galium aparine.
Heracleum lanatum.
Juglans cinerea.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Salix spp.
Thuja occidentalis.
Typha latifolia.

Table 6-9. GENERAL SKIN PROBLEMS SUMMER

Forests

Abies balsamea.
Adiantum spp.
Aesculus hippocastanum.
Aralia spp.
Chimaphila umbellata.
Fraxinus americana.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Pinus strobus.
Populus balsamifera.
Prunus serotina.
Pyrola routundifolia.
Scrophularia marilandica.
Trillium erectum.

Fields and open areas

Achillea spp.
Aralia spp.
Arctium spp.
Heracleum lanatum.
Hypericum perforatum.
Lactuca scariola.
Plantago major.
Rumex crispus.
Trifolium pratense.

Streams and wet areas

Alnus rugosa.
Chelone glabra.
Eupatorium purpureum.
Galium aparine.
Heracleum lanatum.
Juglans cinerea.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Thuja occidentalis.
Typha latifolia.

Table 6-10. GENERAL SKIN PROBLEMS FALL

Forests

Abies balsamea.
Adiantum spp.
Aesculus hippocastanum.
Aralia spp.
Chimaphila umbellata.
Dicentra spp.
Fraxinus americana.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Menispermum canadense.
Pinus strobus.
Polygonatum biflorum.
Populus balsamifera.
Prunus serotina.
Pyrola routundifolia.
Solanum dulcamara.
Trillium erectum.

Fields and open areas

Achillea spp.
Aralia spp.
Arctium spp.
Baptisia tinctoria.
Celastrus scandens.
Heracleum lanatum.
Lactuca scariola.
Plantago major
Rumex crispus.
Trifolium pratense.

Streams and wet areas

Alnus rugosa.
Chelone glabra.
Eupatorium purpureum.
Heracleum lanatum.
Iris versicolor.
Juglans cinerea.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Thuja occidentalis.
Typha latifolia.

Table 6-11. GENERAL SKIN PROBLEMS WINTER

Forests

Abies balsamea.
Aesculus hippocastanum.
Heracleum lanatum.
Juglans cinerea.
Pinus strobus.
Populus balsamifera.
Prunus serotina.

Fields and open areas

Heracleum lanatum.

Streams and wet areas

Alnus rugosa.
Heracleum lanatum.
Juglans cinerea.
Nasturtium officinale.
Populus balsamifera.
Thuja occidentalis.
Typha latifolia.

7. WOUNDS

7. 1. WOUNDS AND SCRATCHES

Table 7-1. WOUNDS AND SCRATCHES SPRING

Forests	
Anemone canadensis.	*Pinus strobus.*
Geranium maculatum.	*Pyrola routundifolia.*
Hamamelis virginiana.	*Scrophularia marilandica.*
Fields and open areas	
Geranium maculatum.	*Rubus spp.*
Juniperus communis.	
Streams and wet areas	
Alnus rugosa.	*Symplocarpus foetidus.*
Anemone canadensis.	*Typha latifolia.*
Pyrola routundifolia.	

Table 7-2. WOUNDS AND SCRATCHES SUMMER

Forests	
Hydrastis canadensis.	*Pyrola routundifolia.*
Pinus strobus.	*Scrophularia marilandica.*
Fields and open areas	
Arctium spp.	*Plantago major.*
Hypericum perforatum.	*Rubus spp.*
Juniperus communis.	
Streams and wet areas	
Alnus rugosa.	*Symplocarpus foetidus.*
Pyrola routundifolia.	*Typha latifolia.*

Table 7-3. WOUNDS AND SCRATCHES FALL

Forests	
Geranium maculatum.	*Pinus strobus.*
Hamamelis virginiana.	*Pyrola routundifolia.*
Hydrastis canadensis.	
Fields and open areas	
Arctium spp.	*Juniperus communis.*
Asclepias tuberosa.	*Plantago major.*
Geranium maculatum.	*Rubus spp.*
Streams and wet areas	
Alnus rugosa.	*Symplocarpus foetidus.*
Asarum canadense.	*Typha latifolia.*
Pyrola routundifolia.	

Table 7-4. WOUNDS AND SCRATCHES WINTER

Forests	
Pinus strobus.	
Fields and open areas	
Juniperus communis.	
Streams and wet areas	
Alnus rugosa.	*Typha latifolia.*

7. 2. BRUISES

Table 7-5. BRUISES SPRING

Forests	
Allium tricoccum.	*Prunella vulgaris.*
Hamamelis virginiana.	*Prunus serotina.*
Fields and open areas	
Cichorium intybus.	*Prunella vulgaris.*
Streams and wet areas	
None	

Table 7-6. BRUISES SUMMER

Forests

Lobelia inflata.
Prunella vulgaris.
Prunus serotina.

Fields and open areas

Daucus carota.
Hypericum perforatum.
Lobelia inflata.
Plantago major.
Prunella vulgaris.
Tanacetum vulgare.

Streams and wet areas

None

Table 7-7. BRUISES FALL

Forests

Hamamelis virginiana.
Polygonatum biflorum.
Prunella vulgaris.
Prunus serotina.

Fields and open areas

Asclepias tuberosa.
Cichorium intybus.
Daucus carota.
Plantago major.
Prunella vulgaris.
Tanacetum vulgare.

Streams and wet areas

Iris versicolor.

Table 7-8. BRUISES WINTER

Forests

Prunus serotina.

Fields and open areas

None

Streams and wet areas

None

7. 3. BURNS

Table 7-9. BURNS SPRING

Forests	
Actea spp.	*Pinus strobus.*
Fagus spp.	*Sanguinaria canadensis.*
Fraxinus americana.	*Viburnam opulus.*
Hamamelis virginiana.	
Fields and open areas	
Rhus spp.	*Taraxacum officinale.*
Streams and wet areas	
Galium aparine.	*Typha latifolia.*
Thuja occidentalis.	

Table 7-10. BURNS SUMMER

Forests	
Actaea spp.	*Pinus strobus.*
Fagus spp.	*Viburnam opulus.*
Fraxinus americana.	
Fields and open areas	
Arctium spp.	*Rhus spp.*
Cynoglossum officinale.	*Taraxacum officinale.*
Streams and wet areas	
Eupatorium purpureum	*Thuja occidentalis.*
Galium aparine.	*Typha latifolia.*

Table 7-11. BURNS FALL

Forests	
Actaea spp.	*Hamamelis virginiana.*
Arisaema triphyllum.	*Pinus strobus.*
Fagus spp.	*Viburnam opulus.*
Fraxinus americana.	
Fields and open areas	
Arctium spp.	*Rhus spp.*
Celastrus scandens.	*Taraxacum officinale.*
Cynoglossum officinale.	
Streams and wet areas	
Arisaema triphyllum.	*Thuja occidentalis.*
Eupatorium purpureum.	*Typha latifolia.*

Table 7-12. BURNS WINTER

Forests	
Actaea spp.	*Pinus strobus.*
Fagus spp.	*Viburnam opulus.*
Fields and open areas	
Taraxacum officinale.	
Streams and wet areas	
Thuja occidentalis.	*Typha latifolia.*

8. INSECT REPELLANTS AND BITES

8.1. INSECT BITES AND REPELLANTS

Table 8-1.
INSECT BITES AND REPELLANTS SPRING

Forests	
Hamamelis virginiana.	*Sanguinaria canadensis.*
Fields and open areas	
None	
Streams and wet areas	
Sarracenia purpurea.	

Table 8-2
INSECT BITES AND REPELLANTS SUMMER

Forests	
Hedeoma pulegioides.	*Hydrastis canadensis.*
Fields and open areas	
Hypericum perforatum.	*Plantago major.*
Streams and wet areas	
Sarracenia purpurea.	

Table 8-3. INSECT BITES AND REPELLANTS FALL

Forests	
Hamamelis virginiana.	*Hydrastis canadensis.*
Fields and open areas	
Plantago major.	
Streams and wet areas	
Sarracenia purpurea.	

9. DISEASES OF WOMEN

9.1. MENSTRUAL PROBLEMS

Table 9-1. MENSTRUAL PROBLEMS SPRING

Forests	
Actaea spp.	*Scrophularia marilandica.*
Adiantum spp.	*Scutellaria lateriflora.*
Fraxinus americana.	*Viburnam opulus.*
Populus balsamifera.	
Fields and open areas	
Capsella bursa-pastoris.	*Scutellaria lateriflora.*
Marrubium vulgare.	
Streams and wet areas	
Populus balsamifera.	*Thuja occidentalis.*
Scutellaria lateriflora.	

Table 9-2. MENSTRUAL PROBLEMS SUMMER

Forests	
Actaea spp.	*Populus balsamifera.*
Adiantum spp.	*Scrophularia marilandica.*
Angelica atropurpurea.	*Scutellaria lateriflora.*
Fraxinus americana.	*Trillium erectum.*
Hedeoma pulegioides.	*Viburnam opulus.*
Fields and open areas	
Achillea spp.	*Nepeta cataria.*
Capsella bursa-pastoris.	*Scutellaria lateriflora.*
Daucus carota.	*Tanacetum vulgare.*
Leonurus cardiaca.	
Streams and wet areas	
Angelica atropurpurea.	*Scutellaria lateriflora.*
Populus balsamifera.	*Thuja occidentalis.*

Table 9-3. MENSTRUAL PROBLEMS FALL

Forests	
Actaea spp.	*Panax quinquefolius.*
Adiantum spp.	*Populus balsamifera.*
Angelica atropurpurea.	*Trillium erectum.*
Chamaelirium luteum.	*Viburnam opulus.*
Fraxinus americana.	
Fields and open areas	
Achillea spp.	*Erigeron canadensis.*
Capsella bursa-pastoris.	*Leonurus cardiaca.*
Celastrus scandens.	*Polygala senega.*
Daucus carota.	*Tanacetum vulgare.*
Streams and wet areas	
Angelica atropurpurea.	*Populus balsamifera.*
Caulophyllum thalictroides.	*Thuja occidentalis.*
Chamaelirium luteum.	

Table 9-4. MENSTRUAL PROBLEMS WINTER

Forests	
Actea spp.	*Viburnam opulus.*
Populus balsamifera.	
Fields and open areas	
None	
Streams and wet areas	
Populus balsamifera.	*Thuja occidentalis.*

9. 2. SORE NIPPLES

Table 9-5. SORE NIPPLES SUMMER

Forests
Trillium erectum.
Fields and open areas
Plantago major.
Streams and wet areas
None

Table 9-6. SORE NIPPLES FALL

Forests	
Mitchella repens.	*Trillium erectum.*
Fields and open areas	
Plantago major.	
Streams and wet areas	
None	

10. EYE PROBLEMS

10. 1. EYE INFECTIONS AND PROBLEMS

Table 10-1.
EYE INFECTIONS AND PROBLEMS SPRING

Forests	
Actaea spp.	*Hamamelis virginiana.*
Anemone canadensis.	*Hepatica acutiloba.*
Chimaphila umbellata.	*Pyrola routundifolia.*
Coptis groenlandica.	*Sassafras albidum.*
Fields and open areas	
Capsella bursa-pastoris.	*Rubus spp.*
Cichorium intybus.	
Streams and wet areas	
Acorus calamus.	*Mentha piperita.*
Alnus rugosa.	*Pyrola routundifolia.*
Anemone canadensis.	*Typha latifolia.*
Coptis groenlandica.	

Table 10-2.
EYE INFECTIONS AND PROBLEMS SUMMER

Forests	
Actaea spp.	*Monotropa uniflora.*
Chimaphila umbellata.	*Osmorhiza longistylis.*
Coptis groenlandica.	*Pyrola routundifolia.*
Hydrastis canadensis.	*Trillium erectum.*
Lobelia inflata.	
Fields and open areas	
Anaphalis margaritacea.	*Rubus spp.*
Capsella bursa-pastoris.	*Rumex crispus.*
Lobelia inflata.	*Tanacetum vulgare.*
Matricaria matricarioides.	
Streams and wet areas	
Alnus rugosa.	*Pyrola routundifolia.*
Coptis groenlandica.	*Typha latifolia.*
Mentha piperita.	

Table 10-3
EYE INFECTIONS AND PROBLEMS FALL

Forests	
Actea spp.	*Hydrastis canadensis.*
Arisaema triphyllum.	*Osmorhiza longistylis.*
Chimaphila umbellata.	*Polygonatum biflorum.*
Coptis groenlandica.	*Pyrola routundifolia.*
Hamamelis virginiana.	*Trillium erectum.*
Fields and open areas	
Capsella bursa-pastoris.	*Rubus spp.*
Cichorium intybus.	*Rumex crispus.*
Matricaria matricarioides.	*Tanacetum vulgare.*
Streams and wet areas	
Acorus calamus.	*Coptis groenlandica.*
Alnus rugosa.	*Mentha piperita.*
Arisaema triphyllum.	*Pyrola routundifolia.*
Asarum canadense.	*Typha latifolia.*

Table 10-4.
EYE INFECTIONS AND PROBLEMS WINTER

Forests
Actaea spp.
Fields and open areas
None
Streams and wet areas
Alnus rugosa. *Typha latifolia.*

11. EAR PROBLEMS

11. 1. EAR INFECTIONS AND PROBLEMS

Table 11-1.
EAR INFECTIONS AND PROBLEMS SPRING

Forests
None
Fields and open areas
Capsella bursa-pastoris.
Streams and wet areas
None

Table 11-2.
EAR INFECTIONS AND PROBLEMS SUMMER

Forests
None
Fields and open areas
Capsella bursa-pastoris. *Verbascum thapsus.*
Tanacetum vulgare.
Streams and wet areas
None

Table 11-3.
EAR INFECTIONS AND PROBLEMS FALL

Forests	
Apocynum spp.	
Fields and open areas	
Apocynum spp.	*Tanacetum vulgare.*
Capsella bursa-pastoris.	*Verbascum thapsus.*
Streams and wet areas	
Asarum canadense.	

12. DISEASES OF THE JOINTS

12. 1. ARTHRITIS

Table 12-1. ARTHRITIS SPRING

Forests
None
Fields and open areas
None
Streams and wet areas
Salix spp.

Table 12-2. ARTHRITIS SUMMER

Forests
None
Fields and open areas
None
Streams and wet areas
Eupatorium perfoliatum.

Table 12-3. ARTHRITIS FALL

Forests	
Menispermum canadense.	*Polygonatum biflorum.*
Fields and open areas	
None	
Streams and wet areas	
Eupatorium perfoliatum.	

12. 2. RHEUMATISM

Table 12-4. RHEUMATISM SPRING

Forests	
Abies balsamea.	*Lithospermum canescens.*
Actea spp.	*Pinus strobus.*
Adiantum spp.	*Populus balsamifera.*
Chimaphila umbellata.	*Sanguinaria canadensis.*
Fields and open areas	
Cichorium intybus	*Lithospermum canescens.*
Streams and wet areas	
Mentha piperita.	*Symplocarpus foetidus.*
Populus balsamifera.	*Thuja occidentalis.*
Salix spp.	

Table 12-5. RHEUMATISM SUMMER

Forests	
Abies balsamea.	*Chimaphila umbellata.*
Actea spp.	*Lithospermum canescens.*
Adiantum spp.	*Pinus strobus.*
Angelica atropurpurea.	*Populus balsamifera.*
Fields and open areas	
Asclepias syriaca.	*Lithospermum canescens.*
Lactuca scariola.	
Streams and wet areas	
Angelica atropurpurea.	*Populus balsamifera.*
Eupatorium perfoliatum.	*Symplocarpus foetidus.*
Eupatorium purpureum.	*Thuja occidentalis.*
Mentha piperita.	

Table 12-6. RHEUMATISM FALL

Forests	
Abies balsamea.	*Chimaphila umbellata.*
Actaea spp.	*Gaultheria procumbens.*
Adiantum spp.	*Menispermum canadense.*
Aletris farinosa.	*Pinus strobus.*
Angelica atropurpurea.	*Polygonatum biflorum.*
Apocynum spp.	*Populus balsamifera.*
Arisaema triphyllum.	*Solanum dulcamara.*
Fields and open areas	
Apocynum spp.	*Gaultheria procumbens.*
Asclepias syriaca.	*Humulus lupulus.*
Asclepias tuberosa.	*Lactuca scariola.*
Celastrus scandens.	*Polygala senega.*
Cichorium intybus.	
Streams and wet areas	
Angelica atropurpurea.	*Mentha piperita.*
Arisaema triphyllum.	*Populus balsamifera.*
Caulophyllum thalictroides.	*Symplocarpus foetidus.*
Eupatorium perfoliatum.	*Thuja occidentalis.*
Eupatorium purpureum.	

Table 12-7. RHEUMATISM WINTER

Forests	
Abies balsamea.	*Pinus strobus.*
Actaea spp.	*Populus balsamifera.*
Fields and open areas	
None	
Streams and wet areas	
Populus balsamifera.	*Thuja occidentalis.*

12. 3. SPRAINS AND SWELLINGS

Table 12-8. SPRAINS AND SWELLINGS SPRING

Forests	
Hamamelis virginiana.	
Fields and open areas	
Cichorium intybus.	
Streams and wet areas	
Alnus rugosa.	*Symplocarpus foetidus.*

Table 12-9. SPRAINS AND SWELLINGS SUMMER

Forests	
Angelica atropurpurea.	*Lobelia inflata.*
Hydrastis canadensis.	*Trillium erectum.*
Fields and open areas	
Artemisia absinthium.	*Plantago major.*
Lobelia inflata.	*Rumex crispus.*
Nepeta cataria.	*Tanacetum vulgare.*
Streams and wet areas	
Alnus rugosa.	*Symplocarpus foetidus.*
Angelica atropurpurea.	

Table 12-10. SPRAINS AND SWELLINGS FALL

Forests	
Angelica atropurpurea.	*Hydrastis canadensis.*
Hamamelis virginiana.	*Trillium erectum.*
Fields and open areas	
Artemisia absinthium.	*Humulus lupulus.*
Baptisia tinctoria.	*Plantago major.*
Celastrus scandens.	*Rumex crispus.*
Cichorium intybus.	*Tanacetum vulgare.*
Streams and wet areas	
Alnus rugosa.	*Iris versicolor.*
Angelica atropurpurea.	*Symplocarpus foetidus.*

Table 12-11. SPRAINS AND SWELLINGS WINTER

Forests
None
Fields and open areas
None
Streams and wet areas
Alnus rugosa.

13. DYES

13. 1. DYES AND CLOTH COLORING

Table 13-1. DYES AND CLOTH COLORING SPRING

Forests	
Coptis groenlandica.	*Juglans nigra.*
Juglans cinerea.	*Sanguinaria canadensis.*
Fields and open areas	
Rhus spp.	
Streams and wet areas	
Alnus rugosa.	*Galium aparine.*
Coptis groenlandica.	*Juglans cinerea.*

Table 13-2.
DYES AND CLOTH COLORING SUMMER

Forests	
Ceanothus americanus.	*Juglans cinerea.*
Coptis groenlandica.	*Juglans nigra.*
Hydrastis canadensis.	
Fields and open areas	
Ceanothus americanus.	*Rhus spp.*
Helianthus annuus.	*Verbascum thapsus.*
Streams and wet areas	
Alnus rugosa.	*Galium aparine.*
Coptis groenlandica.	*Juglans cinerea.*

Table 13-3. DYES AND CLOTH COLORING FALL

Forests	
Ceanothus americanus.	*Juglans cinerea.*
Coptis groenlandica.	*Juglans nigra.*
Hydrastis canadensis.	
Fields and open areas	
Ceanothus americanus.	*Rhus spp.*
Helianthus annuus.	*Verbascum thapsus.*
Streams and wet areas	
Alnus rugosa.	*Juglans cinerea.*
Coptis groenlandica.	

Table 13-4.
DYES AND CLOTH COLORING WINTER

Forests	
Juglans cinerea.	
Fields and open areas	
None	
Streams and wet areas	
Alnus rugosa.	*Juglans cinerea.*

14. PLANT PARTS AND SEASONS

14. 1. ROOTS GATHERED IN THE SEASON

Table 14-1. ROOTS GATHERED IN THE: SPRING

Forests	
Actaea spp.	*Juglans cinerea.*
Allium tricoccum.	*Juglans nigra.*
Anemone canadensis.	*Lithospermum canescens.*
Chimaphila umbellata.	*Populus balsamifera.*
Coptis groenlandica.	*Prunella vulgaris.*
Cypripedium calceolus.	*Prunus serotina.*
Erythronium americanum.	*Pyrola routundifolia.*
Fraxinus americana.	*Sanguinaria canadensis.*
Geranium maculatum.	*Sassafras albidum.*
Hepatica acutiloba.	*Scrophularia marilandica.*
Heracleum lanatum.	
Fields and open areas	
Cichorium intybus.	*Lithospermum canescens.*
Fragaria virginiana.	*Prunella vulgaris.*
Geranium maculatum.	*Rhus spp.*
Geum rivale.	*Rubus spp.*
Heracleum lanatum.	*Taraxacum officinale.*
Streams and wet areas	
Acorus calamus.	*Juglans cinerea.*
Anemone canadensis.	*Populus balsamifera.*
Coptis groenlandica.	*Pyrola routundifolia.*
Cypripedium calceolus.	*Salix spp.*
Galium aparine.	*Sarracenia purpurea.*
Geum rivale.	*Symplocarpus foetidus.*
Heracleum lanatum.	*Typha latifolia.*

Table 14-2. ROOTS GATHERED IN THE: SUMMER

Forests

Actaea spp.
Angelica atropurpurea.
Aquilegia canadensis.
Aralia spp.
Ceanothus americanus.
Chimaphila umbellata.
Coptis groenlandica.
Fraxinus americana.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Lithospermum canescens.
Monotropa uniflora.
Osmorhiza longistylis.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Scrophularia marilandica.
Trillium erectum.

Fields and open areas

Aralia spp.
Arctium spp.
Asclepias syriaca.
Ceanothus americanus.
Cynoglossum officinale.
Daucus carota.
Fragaria virginiana.
Geum rivale.
Heracleum lanatum.
Lithospermum canescens.
Plantago major.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Tanacetum vulgare.
Taraxacum officinale.
Verbascum thapsus.

Streams and wet areas

Angelica atropurpurea.
Aquilegia canadensis.
Coptis groenlandica.
Eupatorium purpureum.
Galium aparine.
Geum rivale.
Heracleum lanatum.
Juglans cinerea.
Populus balsamifera.
Pyrola routundifolia.
Sarracenia purpurea.
Symplocarpus foetidus.
Typha latifolia.

Table 14-3. ROOTS GATHERED IN THE: FALL

Forests

Actaea spp.
Aletris farinosa.
Angelica atropurpurea.
Aplectrum hymale.
Apocynum spp.
Aralia spp.
Arisaema triphyllum.
Ceanothus americanus.
Chamaelirium luteum.
Chimaphila umbellata.
Coptis groenlandica.
Cypripedium calceolus.
Erythronium americanum.
Fraxinus americana.
Gaultheria procumbens.
Geranium maculatum.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Menispermum canadense.
Osmorhiza longistylis.
Panax quinquefolius.
Polygonatum biflorum.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Trillium erectum.

Fields and open areas

Apocynum spp.
Aralia spp.
Arctium spp.
Asclepias syriaca.
Asclepias tuberosa.
Baptisia tinctoria.
Berberis vulgaris.
Ceanothus americanus.
Celastrus scandens.
Cichorium intybus.
Cynoglossum officinale.
Daucus carota.
Erigeron canadensis.
Fragaria virginiana.
Gaultheria procumbens.
Geranium maculatum.
Geum rivale.
Heracleum lanatum.
Plantago major.
Polygala senega.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Tanacetum vulgare.
Taraxacum officinale.
Verbascum thapsus.

Streams and wet areas

Acorus calamus.
Angelica atropurpurea.
Aplectrum hymale.
Arisaema triphyllum.
Asarum canadense.
Caulophyllum thalictroides.
Chamaelirium luteum.
Coptis groenlandica.
Cypripedium calceolus.
Eupatorium purpureum.
Geum rivale.
Heracleum lanatum.
Iris versicolor.
Juglans cinerea.
Populus balsamifera.
Pyrola routundifolia.
Sarracenia purpurea.
Symplocarpus foetidus.
Typha latifolia.

Table 14-4. ROOTS GATHERED IN THE: WINTER

Forests	
Actaea spp.	*Populus balsamifera.*
Heracleum lanatum.	*Prunus serotina.*
Juglans cinerea.	
Fields and open areas	
Geum rivale.	*Taraxacum officinale.*
Heracleum lanatum.	
Streams and wet areas	
Geum rivale.	*Populus balsamifera.*
Heracleum lanatum.	*Typha latifolia.*
Juglans cinerea.	

14. 2. HERB GATHERED IN THE SEASON

Table 14-5. HERB GATHERED IN THE: SPRING

Forests	
Anemone canadensis.	*Hepatica acutiloba.*
Chimaphila umbellata.	*Heracleum lanatum.*
Erythronium americanum.	*Prunella vulgaris.*
Fagus spp.	*Scutellaria lateriflora.*
Fields and open areas	
Capsella bursa-pastoris.	*Heracleum lanatum.*
Cichorium intybus.	*Marrubium vulgare.*
Fragaria virginiana.	*Prunella vulgaris.*
Geum rivale.	*Scutellaria lateriflora.*
Streams and wet areas	
Anemone canadensis.	*Mentha spicata.*
Galium aparine.	*Nasturtium officinale.*
Geum rivale.	*Scutellaria lateriflora.*
Heracleum lanatum.	*Thuja occidentalis.*
Mentha piperita.	

Table 14-6. HERB GATHERED IN THE: SUMMER

Forests	
Aquilegia canadensis.	*Lobelia inflata.*
Chimaphila umbellata.	*Monarda fistulosa.*
Fagus spp.	*Prunella vulgaris.*
Hedeoma pulegioides	*Scutellaria lateriflora.*
Heracleum lanatum.	
Fields and open areas	
Achillea spp.	*Lobelia inflata.*
Anaphalis margaritacea.	*Matricaria matricarioides.*
Artemesia absinthium.	*Medicago sativa.*
Capsella bursa-pastoris.	*Monarda fistulosa.*
Fragaria virginiana.	*Prunella vulgaris.*
Geum rivale.	*Rumex crispus.*
Heracleum lanatum.	*Scutellaria lateriflora.*
Hypericum perforatum.	*Tanacetum vulgare.*
Lactuca scariola.	*Trifolium pratense.*
Leonurus cardiaca.	
Streams and wet areas	
Aquilegia canadensis.	*Mentha piperita.*
Galium aparine.	*Mentha spicata.*
Geum rivale.	*Nasturtium officinale.*
Heracleum lanatum.	*Scutellaria lateriflora.*
Lycopus virginicus.	*Thuja occidentalis.*

Table 14-7. HERB GATHERED IN THE: FALL

Forests	
Chimaphila umbellata.	*Mitchella repens.*
Erythronium americanum.	*Monarda fistulosa.*
Fagus spp.	*Prunella vulgaris.*
Heracleum lanatum.	
Fields and open areas	
Achillea spp.	*Lactuca scariola.*
Artemesia absinthium.	*Leonurus cardiaca.*
Capsella bursa-pastoris.	*Matricaria matricariodes.*
Cichorium intybus.	*Medicago sativa.*
Erigeron canadensis.	*Monarda fistulosa.*
Fragaria virginiana.	*Prunella vulgaris.*
Geum rivale.	*Rumex crispus.*
Heracleum lanatum.	*Tanacetum vulgare.*
Humulus lupulus.	*Trifolium pratense.*
Streams and wet areas	
Geum rivale.	*Mentha spicata.*
Heracleum lanatum.	*Nasturtium officinale.*
Lycopus virginicus.	*Thuja occidentalis.*
Mentha piperita.	

Table 14-8. HERB GATHERED IN THE: WINTER

Forests	
Fagus spp.	*Heracleum lanatum.*
Fields and open areas	
Geum rivale.	*Heracleum lanatum.*
Streams and wet areas	
Geum rivale.	*Nasturtium officinale.*
Heracleum lanatum.	*Thuja occidentalis.*

14. 3. LEAVES GATHERED IN THE SEASON

Table 14-9. LEAVES GATHERED IN THE: SPRING

Forests	
Abies balsamea.	*Heracleum lanatum.*
Adiantum spp.	*Lithospermum canescens.*
Chimaphila umbellata.	*Pinus strobus.*
Erythronium americanum.	*Populus balsamifera.*
Fagus spp.	*Prunella vulgaris.*
Fraxinus americana.	*Prunus serotina.*
Hamamelis virginiana.	*Sassafras albidum.*
Hepatica acutiloba.	
Fields and open areas	
Capsella bursa-pastoris.	*Lithospermum canescens.*
Cichorium intybus.	*Prunella vulgaris.*
Fragaria virginiana.	*Rhus spp.*
Heracleum lanatum.	*Rubus spp.*
Juniperus communis.	*Taraxacum officinale.*
Streams and wet areas	
Acorus calamus.	*Populus balsamifera.*
Chelone glabra.	*Sarracenia purpurea.*
Heracleum lanatum.	*Symplocarpus foetidus.*
Mentha piperita.	*Thuja occidentalis.*
Mentha spicata.	

Table 14-10.
LEAVES GATHERED IN THE: SUMMER

Forests

Abies balsamea.
Adiantum spp.
Angelica atropurpurea.
Ceanothus americanus.
Chimaphila umbellata.
Fagus spp.
Fraxinus americana.
Heracleum lanatum
Lithospermum canescens.
Lobelia inflata.
Monarda fistulosa.
Pinus strobus.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.

Fields and open areas

Achillea spp.
Capsella bursa-pastoris.
Ceanothus americanus.
Comptonia peregrina.
Cynoglossum officinale.
Fragaria virginiana.
Heracleum lanatum.
Hypericum perforatum.
Juniperus communis.
Lactuca scariola.
Leonarus cardiaca.
Lithospermum canescens.
Lobelia inflata.
Monarda fistulosa.
Nepeta cataria.
Plantago major.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Tanacetum vulgare.
Taraxacum officinale.
Verbascum thapsus.

Streams and wet areas

Angelica atropurpurea.
Chelone glabra.
Eupatorium perfoliatum.
Eupatorium purpureum.
Heracleum lanatum.
Mentha piperita.
Mentha spicata.
Populus balsamifera.
Sarracenia purpurea.
Symplocarpus foetidus.
Thuja occidentalis.

Table 14-11. LEAVES GATHERED IN THE: FALL

Forests

Abies balsamea.
Adiantum spp.
Aletris farinosa.
Angelica atropurpurea.
Arctostaphylos uva-ursi.
Ceanothus americanus.
Chimaphila umbellata.
Erythronium americanum.
Fagus spp.
Fraxinus americana.
Gaultheria procumbens.
Hamamelis virginiana.
Heracleum lanatum.
Monarda fistulosa.
Pinus strobus.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Solanum dulcamara.

Fields and open areas

Achillea spp.
Arctostaphylos uva-ursi.
Cannabis sativa.
Capsella bursa-pastoris.
Ceanothus americanus.
Celastrus scandens.
Cichorium intybus.
Comptonia peregrina.
Cynoglossum officinale.
Erigeron canadensis.
Fragaria virginiana.
Gaultheria procumbens.
Heracleum lanatum.
Humulus lupulus.
Juniperus communis.
Lactuca scariola.
Leonurus cardiaca.
Monarda fistulosa.
Plantago major.
Polygala senega.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Tanacetum vulgare.
Taraxacum officinale.
Verbascum thapsus.

Streams and wet areas

Acorus calamus.
Angelica atropurpurea.
Caulophyllum thalictroides.
Chelone glabra.
Eupatorium perfoliatum.
Eupatorium purpureum.
Heracleum lanatum.
Mentha piperita.
Mentha spicata.
Populus balsamifera.
Sarracenia purpurea.
Symplocarpus foetidus.
Thuja occidentalis.

Table 14-12.
LEAVES GATHERED IN THE: WINTER

Forests	
Abies balsamea.	*Pinus strobus.*
Fagus spp.	*Populus balsamifera.*
Heracleum lanatum.	*Prunus serotina.*
Fields and open areas	
Heracleum lanatum.	*Taraxacum officinale.*
Juniperus communis.	
Streams and wet areas	
Heracleum lanatum.	*Thuja occidentalis.*
Populus balsamifera.	

14. 4. FLOWERS GATHERED IN THE SEASON

Table 14-13.
FLOWERS GATHERED IN THE: SPRING

Forests	
Erythronium americanum.	*Sassafras albidum.*
Fields and open areas	
Rhus spp.	
Streams and wet areas	
Typha latifolia.	

Table 14-14.
FLOWERS GATHERED IN THE: SUMMER

Forests	
None	
Fields and open areas	
Achillea spp.	*Nepeta cataria.*
Anaphalis margaritacea.	*Rhus spp.*
Asclepias syriaca.	*Trifolium pratense.*
Helianthus annuus.	*Verbascum thapsus.*
Streams and wet areas	
Typha latifolia.	

Table 14-15. FLOWERS GATHERED IN THE: FALL

Forests	
Erythronium americanum.	
Fields and open areas	
Achillea spp.	*Helianthus annuus.*
Asclepias syriaca.	*Rhus spp.*
Cannabis sativa.	*Trifolium pratense.*
Erigeron canadensis.	*Verbascum thapsus.*
Streams and wet areas	
Typha latifolia.	

Table 14-16.
FLOWERS TATHERED IN THE: WINTER

Forests
None
Fields and open areas
None
Streams and wet areas
Typha latifolia

14. 5. SEEDS OR FRUIT IN THE SEASON

Table 14-17. SEEDS OR FRUIT IN THE: SPRING

Forests	
Aesculus hippocastanum.	*Juglans nigra.*
Fraxinus americana.	*Prunus serotina.*
Juglans cinerea.	*Sanguinaria canadensis.*
Fields and open areas	
Fragaria virginiana.	*Rhus spp.*
Juniperus communis.	*Rubus spp.*
Streams and wet areas	
Galium aparine.	*Juglans cinerea.*

Table 14-18. SEEDS OR FRUIT IN THE: SUMMER

Forests	
Aesculus hippocastanum.	*Juglans cinerea.*
Aquilegia canadensis.	*Juglans nigra.*
Fraxinus americana.	*Prunus serotina.*
Fields and open areas	
Asclepias syriaca.	*Plantago major.*
Comptonia peregrina.	*Rhus spp.*
Daucus carota.	*Rubus spp.*
Fragaria virginiana.	*Rumex crispus.*
Helianthus annuus.	*Trifolium pratense.*
Juniperus communis.	
Streams and wet areas	
Aquilegia canadensis.	*Juglans cinerea.*
Galium aparine.	

Table 14-19. SEEDS OR FRUIT IN THE: FALL

Forests	
Aesculus hippocastanum.	*Juglans nigra.*
Apocynum spp.	*Menispermum canadense.*
Fraxinus americana.	*Prunus serotina.*
Juglans cinerea.	
Fields and open areas	
Apocynum spp.	*Helianthus annuus.*
Asclepias syriaca.	*Juniperus communis.*
Berberis vulgaris.	*Plantago major.*
Celastrus scandens.	*Rhus spp.*
Comptonia peregrina.	*Rubus spp.*
Daucus carota.	*Rumex crispus.*
Fragaria virginiana.	*Trifolium pratense.*
Streams and wet areas	
Caulophyllum thalictroides.	*Juglans cinerea.*

Table 14-20. SEEDS OR FRUIT IN THE: WINTER

Forests	
Aesculus hippocastanum.	*Prunus serotina.*
Juglans cinerea.	
Fields and open areas	
Juniperus communis.	
Streams and wet areas	
Juglans cinerea.	

14. 6. PLANTS GATHERED IN THE SEASON

Table 14-21. PLANTS GATHERED IN THE: SPRING

Forests

Abies balsamea.
Actaea spp.
Adiantum spp.
Aesculus hippocastanum.
Allium tricoccum.
Anemone canadensis.
Chimaphila umbellata.
Coptis groenlandica.
Cypripedium celceolus.
Dicentra spp.
Erythronium americanum.
Fagus spp.
Fraxinus americana.
Geranium maculatum.
Hamamelis virginiana.
Hepatica acutiloba.
Heracleum lanatum.
Juglans cinerea.
Juglans nigra.
Lithospermum canescens.
Pinus strobus.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Sanguinaria canadensis.
Sassafras albidum.
Scrophularia marilandica.
Scutellaria lateriflora.
Viburnam opulus.

Fields and open areas

Betula allenghaniensis.
Capsella bursa-pastoris.
Cichorium intybus.
Fragaria virginiana.
Geranium maculatum.
Geum rivale.
Heracleum lanatum.
Juniperus communis.
Lithospermum canescens.
Marrubium vulgare.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Scutellaria lateriflora.
Taraxacum officinale.

Streams and wet areas

Acorus calamus.
Alnus rugosa.
Anemone canadensis.
Chelone glabra.
Coptis groenlandica.
Cypripedium calceolus.
Galium aparine.
Geum rivale.
Heracleum lanatum.
Juglans cinerea.
Mentha piperita.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Salix spp.
Sarracenia purpurea.
Scutellaria lateriflora.
Symplocarpus foetidus.
Thuja occidentalis.
Typha latifolia.

Table 14-22. PLANTS GATHERED IN THE: SUMMER

Forests

Abies balsamea.
Actea spp.
Adiantum spp.
Aesculus hippocastanum.
Angelica atropurpurea.
Aquilegia canadensis.
Aralia spp.
Ceanothus americanus.
Chimaphila umbellata.
Coptis groenlandica.
Fagus spp.
Fraxinus americana.
Hedeoma pulegioides.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Lithospermum canescens.
Lobelia inflata.
Monarda fistulosa.
Monotropa uniflora.
Osmorhiza longistylis.
Pinus strobus.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Scrophularia marilandica.
Scutellaria lateriflora.
Trillium erectum.
Viburnam opulus.

Fields and open areas

Achillea spp.
Anaphalis margaritacea.
Aralia spp.
Arctium spp.
Artemesia absinthium.
Asclepias syriaca.
Betula allenghaniensis.
Capsella bursa-pastoris.
Ceanothus americanus.
Comptonia peregrina.
Cynoglossum officinale.
Daucus carota.
Fragaria virginiana.
Geum rivale.
Helianthus annuus.
Heracleum lanatum.
Hypericum perforatum.
Juniperus communis.
Lactuca scariola.
Leonurus cardiaca.
Lithospermum canescens.
Lobelia inflata.
Matricaria matricarioides.
Medicago sativa.
Monarda fistulosa.
Nepeta cataria.
Plantago major.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Scutellaria lateriflora.
Tanacetum vulgare.
Taraxacum officinale.
Trifolium pratense.
Verbascum thapsus.

Streams and wet areas

Alnus rugosa.
Angelica atropurpurea.
Aquilegia canadensis.
Chelone glabra.
Coptis groenlandica.
Eupatorium perfoliatum.
Eupatorium purpureum.
Galium aparine.
Geum rivale.
Heracleum lanatum.
Juglans cinerea.
Lycopus virginicus.
Mentha piperita.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Sarracenia purpurea.
Scutellaria lateriflora.
Symplocarpus foetidus.
Thuja occidentalis.
Typha latifolia.

Table 14-23. PLANTS GATHERED IN THE: FALL

Forests

Abies balsamea
Actea spp.
Adiantum spp.
Aesculus hippocastanum.
Aletris farinosa.
Angelica atropurpurea.
Aplectrum hymale.
Apocynum spp.
Aralia spp.
Arctostaphylos uva-ursi.
Arisaema triphyllum.
Ceanothus americanus.
Chamaelirium luteum.
Chimphila umbellata.
Coptis groenlandica.
Cypripedium calceolus.
Dicentra spp.
Erythronium americanum.
Fagus spp.
Fraxinus americana.
Gaultheria procumbens.
Geranium maculatum.
Hamamelis virginiana.
Heracleum lanatum.
Hydrastis canadensis.
Juglans cinera.
Juglans nigra.
Menispermum canadense.
Mitchella repens.
Monarda fistulosa.
Osmorhiza longistylis.
Panax quinquefolius.
Pinus strobus.
Polygonatum biflorum.
Populus balsamifera.
Prunella vulgaris.
Prunus serotina.
Pyrola routundifolia.
Solanum dulcamara.
Trillium erectum.
Viburnam opulus.

Fields and open areas

Achillea spp.
Apocynum spp.
Aralia spp.
Arctium spp.
Arctostaphylos uva-ursi.
Artemisia absinthium.
Asclepias syriaca.
Asclepias tuberosa.
Baptisia tinctoria.
Berberis vulgaris.
Betula allenghaniensis.
Cannabis sativa.
Capsella bursa-pastoris.
Ceanothus americanus.
Celastrus scandens.
Cichorium intybus.
Comptonia peregrina.
Cynoglossum officinale.
Daucus carota.
Erigeron canadensis.
Fragaria virginiana.
Gaultheria procumbens.
Geranium maculatum.
Geum rivale.
Helianthus annuus.
Heracleum lanatum.
Humulus lupulus.
Juniperus communis.
Lactuca scariola.
Leonurus cardiaca.
Matricaria matricariodes.
Medicago sativa.
Monarda fistulosa.
Plantago major.
Polygala senega.
Prunella vulgaris.
Rhus spp.
Rubus spp.
Rumex crispus.
Tanacetum vulgare.
Taraxacum officinale.
Trifolium pratense.
Verbascum thapsus.

Streams and wet areas

Acorus calamus.
Alnus rugosa.
Angelica atropurpurea.
Aplectrum hymale.
Arisaema triphyllum.
Asarum canadense.
Caulophyllum thalictroides.
Chamaelirium luteum.
Chelone glabra.
Coptis groenlandica.
Cypripedium calceolus.
Eupatorium perfoliatum.
Eupatorium purpureum.
Geum rivale.
Heracleum lanatum.
Iris versicolor.
Juglans cinerea.
Lycopus virginicus.
Mentha piperita.
Mentha spicata.
Nasturtium officinale.
Populus balsamifera.
Pyrola routundifolia.
Sarracenia purpurea.
Symplocarpus foetidus.
Thuja occidentalis.
Typha latifolia.

Table 14-24. PLANTS GATHERED IN THE: WINTER

Forests	
Abies balsamea.	*Juglans cinerea.*
Actaea spp.	*Pinus strobus.*
Aesculus hippocastanum.	*Populus balsamifera.*
Fagus spp.	*Prunus serotina.*
Heracleum lanatum.	*Viburnam opulus.*
Fields and open areas	
Betula allenghaniensis.	*Juniperus communis.*
Geum rivale.	*Taraxacum officinale.*
Heracleum lanatum.	
Streams and wet areas	
Alnus rugosa.	*Nasturtium officinale.*
Geum rivale.	*Populus balsamifera.*
Heracleum lanatum.	*Thuja occidentalis.*
Juglans cinerea.	*Typha latifolia.*

15. THERAPEUTICAL TERMS

15. 1. ABORTIFACIENT

Table 15-1. ABORTIFACIENT SUMMER

Forests
None
Fields and open areas
Tanacetum vulgare.
Streams and wet areas
None

Table 15-2. ABORTIFACIENT FALL

Forests
None
Fields and open areas
Tanacetum vulgare.
Streams and wet areas
None

15. 2. ALTERATIVE

Table 15-3. ALTERATIVE SPRING

Forests	
Dicentra spp.	
Fields and open areas	
None	
Streams and wet areas	
Alnus rugosa.	*Galium aparine.*

Table 15-4. ALTERATIVE SUMMER

Forests	
Aralia spp.	*Trillium erectum.*
Fields and open areas	
Aralia spp.	*Rumex crispus.*
Arctium spp.	*Trifolium pratense.*
Streams and wet areas	
Alnus rugosa.	*Galium aparine.*

Table 15-5. ALTERATIVE FALL

Forests	
Aralia spp.	*Solanum dulcamara.*
Dicentra spp.	*Trillium erectum.*
Menispermum canadense.	
Fields and open areas	
Aralia spp.	*Rumex crispus.*
Arctium spp.	*Trifolium pratense.*
Celastrus scandens.	
Streams and wet areas	
Alnus rugosa.	*Iris versicolor.*

Table 15-6. ALTERATIVE WINTER

Forests
None
Fields and open areas
None
Streams and wet areas
Alnus rugosa.

15.3. ANODYNE

Table 15-7. ANODYNE SPRING

Forests
Chimaphila umbellata.
Fields and open areas
None
Streams and wet areas
None

Table 15-8. ANODYNE SUMMER

Forests	
Chimaphila umbellata.	
Fields and open areas	
Cynoglossum officinale.	
Streams and wet areas	
None	

Table 15-9. ANODYNE FALL

Forests	
Chimaphila umbellata.	
Fields and open areas	
Cannabis sativa.	*Humulus lupulus.*
Cynoglossum officinale.	
Streams and wet areas	
None	

15.4. ANTIBIOTIC

Table 15-10. ANTIBIOTIC SPRING

Forests	
Allium tricoccum.	*Sanguinaria canadensis.*
Geranium maculatum.	
Fields and open areas	
Geranium maculatum.	*Rhus spp.*
Streams and wet areas	
Acorus calamus.	

Table 15-11. ANTIBIOTIC SUMMER

Forests	
Hydrastis canadensis.	
Fields and open areas	
Achillea spp.	*Rhus spp.*
Arctium spp.	*Tanacetum vulgare.*
Hypericum perforatum.	*Verbascum thapsus.*
Streams and wet areas	
None	

Table 15-12. ANTIBIOTIC FALL

Forests	
Apocynum spp.	*Hydrastis canadensis.*
Arctostaphylos uva-ursi.	*Mitchella repens.*
Geranium maculatum.	
Fields and open areas	
Achillea spp.	*Geranium maculatum.*
Apocynum spp.	*Humulus lupulus.*
Arctium spp.	*Rhus spp.*
Arctostaphylos uva-ursi.	*Tanacetum vulgare.*
Cannabis sativa.	*Verbascum thapsus.*
Streams and wet areas	
Acorus calamus.	*Asarum canadense.*

15.5. ANTISEPTIC

Table 15-13. ANTISEPTIC SPRING

Forests	
Fagus spp.	*Pinus strobus.*
Fields and open areas	
Betula allenghaniensis.	*Juniperus communis.*
Streams and wet areas	
None	

Table 15-14. ANTISEPTIC — SUMMER

Forests	
Fagus spp.	*Pinus strobus.*
Fields and open areas	
Betula allenghaniensis.	*Juniperus communis.*
Streams and wet areas	
None	

Table 15-15. ANTISEPTIC — FALL

Forests	
Arctostaphylos uva-ursi.	*Pinus strobus.*
Fagus spp.	
Fields and open areas	
Arctostaphylos uva-ursi.	*Betula allenghaniensis.*
Baptisia tinctoria.	*Juniperus communis.*
Berberis vulgaris.	
Streams and wet areas	
None	

Table 15-16. ANTISEPTIC — WINTER

Forests	
Fagus spp.	*Pinus strobus.*
Fields and open areas	
Betula allenghaniensis.	*Juniperus communis.*
Streams and wet areas	
None	

15. 6. ANTISPASMODIC

Table 15-17. ANTISPASMODIC SPRING

Forests	
Cypripedium calceolus.	*Scutellaria lateriflora.*
Heracleum lanatum.	*Viburnam opulus.*
Fields and open areas	
Heracleum lanatum.	*Scutellaria lateriflora.*
Streams and wet areas	
Cypripedium calceolus.	*Mentha spicata.*
Heracleum lanatum.	*Scutellaria lateriflora.*
Mentha piperita.	*Symplocarpus foetidus.*

Table 15-18. ANTISPASMODIC SUMMER

Forests	
Ceanothus americanus.	*Scutellaria lateriflora.*
Heracleum lanatum.	*Viburnam opulus.*
Lobelia inflata.	
Fields and open areas	
Ceanothus americanus.	*Nepeta cataria.*
Heracleum lanatum.	*Scutellaria lateriflora.*
Lobelia inflata.	*Trifolium pratense.*
Streams and wet areas	
Heracleum lanatum.	*Scutellaria lateriflora.*
Mentha piperita.	*Symplocarpus foetidus.*
Mentha spicata.	

Table 15-19. ANTISPASMODIC FALL

Forests	
Ceanothus americanus.	*Heracleum lanatum.*
Cypripedium calceolus.	*Viburnam opulus.*
Fields and open areas	
Cannabis sativa.	*Heracleum lanatum.*
Ceanothus americanus.	*Trifolium pratense.*
Streams and wet areas	
Cypripedium calceolus.	*Mentha spicata.*
Heracleum lanatum.	*Symplocarpus foetidus.*
Mentha piperita.	

Table 15-20. ANTISPASMODIC WINTER

Forests	
Heracleum lanatum.	*Viburnam opulus.*
Fields and open areas	
Heracleum lanatum.	
Streams and wet areas	
Heracleum lanatum.	

15. 7. APHRODISIAC

Table 15-21. APHRODISIAC

Forests	
Fraxinus americana.	
Fields and open areas	
None	
Streams and wet areas	
Nasturtium officinale.	*Salix spp.*

Table 15-22. APHRODISIAC SUMMER

Forests	
Fraxinus americana.	*Trillium erectum.*
Fields and open areas	
Arctium spp.	
Streams and wet areas	
Eupatorium purpureum.	*Nasturtium officinale.*

Table 15-23. APHRODISIAC FALL

Forests	
Fraxinus americana.	*Trillium erectum.*
Panax quinquefolius.	
Fields and open areas	
Arctium spp.	*Cannabis sativa.*
Streams and wet areas	
Eupatorium purpureum.	*Nasturtium officinale.*

Table 15-24. APHRODISIAC WINTER

Forests
None
Fields and open areas
None
Streams and wet areas
Nasturtium officinale.

15.8. ASTRINGENT

Table 15-25. ASTRINGENT SPRING

Forests	
Aesculus hippocastanum.	*Hepatica acutiloba.*
Chimaphila umbellata.	*Juglans nigra.*
Fagus spp.	*Prunella vulgaris.*
Geranium maculatum.	*Prunus serotina.*
Hamamelis virginiana.	*Pyrola routundifolia.*
Fields and open areas	
Betula allenghaniensis.	*Geum rivale.*
Capsella bursa-pastoris.	*Prunella vulgaris.*
Fragaria virginiana.	*Rhus spp.*
Geranium maculatum.	*Rubus spp.*
Streams and wet areas	
Alnus rugosa.	*Pyrola routundifolia.*
Geum rivale.	*Salix spp.*

Table 15-26. ASTRINGENT **SUMMER**

Forests	
Aesculus hippocastanum.	*Juglans nigra.*
Ceanothus americanus.	*Prunella vulgaris.*
Chimaphila umbellata.	*Prunus serotina.*
Fagus spp.	*Pyrola routundifolia.*
Hydrastis canadensis.	*Trillium erectum.*
Fields and open areas	
Achillea spp.	*Fragaria virginiana.*
Anaphalis margaritacea.	*Geum rivale.*
Betula allenghaniensis.	*Hypericum perforatum.*
Capsella bursa-pastoris.	*Prunella vulgaris.*
Ceanothus americanus.	*Rhus spp.*
Comptonia peregrina.	*Rubus spp.*
Cynoglossum officinale.	*Rumex crispus.*
Streams and wet areas	
Alnus rugosa.	*Lycopus virginicus.*
Eupatorium purpureum.	*Pyrola routundifolia.*
Geum rivale.	

Table 15-27. ASTRINGENT **FALL**

Forests	
Aesculus hippocastanum.	*Hydrastis canadensis.*
Arctostaphylos uva-ursi.	*Juglans nigra.*
Ceanothus americanus.	*Mitchella repens.*
Chimaphila umbellata.	*Polygonatum biflorum.*
Fagus spp.	*Prunella vulgaris.*
Gaultheria procumbens.	*Prunus serotina.*
Geranium maculatum.	*Pyrola routundifolia.*
Hamamelis virginiana.	*Trillium erectum.*
Fields and open areas	
Achillea spp.	*Fragaria virginiana.*
Arctostaphylos uva-ursi.	*Gaultheria procumbens.*
Betula allenghaniensis.	*Geranium maculatum.*
Capsella bursa-pastoris.	*Geum rivale.*
Ceanothus americanus.	*Prunella vulgaris.*
Comptonia peregrina.	*Rhus spp.*
Cynoglossum officinale.	*Rubus spp.*
Erigeron canadensis.	*Rumex crispus.*
Streams and wet areas	
Alnus rugosa.	*Lycopus virginicus.*
Eupatorium purpureum.	*Pyrola routundifolia.*
Geum rivale.	

Table 15-28. ASTRINGENT **WINTER**

Forests	
Aesculus hippocastanum.	*Prunus serotina.*
Fagus spp.	
Fields and open areas	
Betula allenghaniensis.	*Geum rivale.*
Streams and wet areas	
Alnus rugosa.	*Geum rivale.*

15.9. BITTERS

Table 15-29. BITTERS SPRING

Forests
Coptis groenlandica.
Fields and open areas
None
Streams and wet areas
Coptis groenlandica.

Table 15-30. BITTERS SUMMER

Forests
Coptis groenlandica.
Fields and open areas
Artemisia absinthium.
Streams and wet areas
Coptis groenlandica.

Table 15-31. BITTERS FALL

Forests	
Coptis groenlandica.	
Fields and open areas	
Artemisia absinthium.	*Humulus lupulus.*
Celastrus scandens.	
Streams and wet areas	
Coptis groenlandica.	

15.10 CARCINOGENIC

Table 15-32. CARCINOGENIC SPRING

Forests

Sassafras albidum.

Fields and open areas

None

Streams and wet areas

None

15.11. CATHARTIC, APERIENT, LAXATIVE, PURGATIVE

Table 15-33. SPRING
CATHARTIC, APERIENT, LAXATIVE, PURGATIVE

Forests

Actea spp.
Fraxinus americana.
Juglans cinerea.
Juglans nigra.
Sanguinaria canadensis.

Fields and open areas

Cichorium intybus.
Marrubium vulgare.
Taraxacum officinale.

Streams and wet areas

Chelone glabra.
Galium aparine.
Juglans cinerea.

Table 15-34. SUMMER
CATHARTIC, APERIENT, LAXATIVE, PURGATIVE

Forests

Actaea spp.
Fraxinus americana.
Hydrastis canadensis.
Juglans cinerea.
Juglans nigra.
Lobelia inflata.

Fields and open areas

Asclepias syriaca.
Lobelia inflata.
Plantago major.
Rumex crispus.
Taraxacum officinale.

Streams and wet areas

Chelone glabra.
Eupatorium perfoliatum.
Galium aparine.
Juglans cinerea.

Table 15-35. FALL
CATHARTIC, APERIENT, LAXATIVE, PURGATIVE

Forests	
Actaea spp.	*Hydrastis canadensis.*
Apocynum spp.	*Juglans cinerea.*
Fraxinus americana.	*Juglans nigra.*
Fields and open areas	
Apocynum spp.	*Cichorium intybus.*
Asclepias syriaca.	*Plantago major.*
Asclepias tuberosa.	*Polygala senega.*
Baptisia tinctoria.	*Rumex crispus.*
Berberis vulgaris.	*Taraxacum officinale.*
Streams and wet areas	
Chelone glabra.	*Iris versicolor.*
Eupatorium perfoliatum.	*Juglans cinera.*

Table 15-36. WINTER
CATHARTIC, APERIENT, LAXATIVE, PURGATIVE

Forests	
Actea spp.	*Juglans cinera.*
Fields and open areas	
Taraxacum officinale.	
Streams and wet areas	
Juglans cinerea.	

15. 12. CONDIMENT

Table 15-37. CONDIMENT SUMMER

Forests
Angelica atropurpurea.
Fields and open areas
None
Streams and wet areas
Angelica atropurpurea.

Table 15-38. CONDIMENT FALL

Forests
Angelica atropurpurea.
Fields and open areas
None
Streams and wet areas
Angelica atropurpurea.

15. 13. DEMULCENT

Table 15.39. DEMULCENT SPRING

Forests	
Adiantum spp.	*Sassafras albidum.*
Hepatica acutiloba.	
Fields and open areas	
None	
Streams and wet areas	
None	

Table 15-40. DEMULCENT SUMMER

Forests	
Adiantum spp.	
Fields and open areas	
Cynoglossum officinale.	*Verbascum thapsus.*
Streams and wet areas	
None	

Table 15-41. DEMULCENT FALL

Forests	
Adiantum spp.	*Polygonatum biflorum.*
Aplectrum hymale.	
Fields and open areas	
Cynoglossum officinale.	*Verbascum thapsus.*
Streams and wet areas	
Aplectrum hymale.	

15. 14. DENTIFRICE

Table 15-42. DENTIFRICE SPRING

Forests
None
Fields and open areas
Fragaria virginiana.
Streams and wet areas
Acorus calamus.

Table 15-43. DENTIFRICE SUMMER

Forests
None
Fields and open areas
Fragaria virginiana.
Streams and wet areas
None

Table 15-44. DENTIFRICE FALL

Forests
None

Fields and open areas
Fragaria virginiana.

Streams and wet areas
Acorus calamus.

15. 15. DERMATITIS

Table 15-45. DERMATITIS SPRING

Forests	
Abies balsamea.	*Heracleum lanatum.*
Cypripedium calceolus.	*Populus balsamifera.*
Fraxinus americana.	*Sanguinaria canadensis.*
Fields and open areas	
Heracleum lanatum.	
Streams and wet areas	
Cypripedium calceolus.	Mentha spicata.
Heracleum lanatum.	Populus balsamifera.

Table 15-46. DERMATITIS SUMMER

Forests	
Abies balsamea.	*Heracleum lanatum.*
Fraxinus americana.	*Lobelia inflata.*
Hedeoma pulegioides.	*Populus balsamifera.*
Fields and open areas	
Arctium spp.	*Leonurus cardiaca.*
Artemisia absinthium.	*Lobelia inflata.*
Daucus carota.	*Rumex crispus.*
Heracleum lanatum.	*Tanacetum vulgare.*
Hypericum perforatum.	
Streams and wet areas	
Eupatorium perfoliatum.	*Mentha spicata.*
Heracleum lanatum.	*Populus balsamifera.*

Table 15-47. DERMATITIS FALL

Forests	
Abies balsamea.	*Fraxinus americana.*
Apocynum spp.	*Heracleum lanatum.*
Arisaema triphyllum.	*Populus balsamifera.*
Cypripedium calceolus.	
Fields and open areas	
Apocynum spp.	*Heracleum lanatum.*
Arctium spp.	*Humulus lupulus.*
Artemisia absinthium.	*Leonurus cardiaca.*
Cannabis sativa.	*Rumex crispus.*
Daucus carota.	*Tanacetum vulgare.*
Erigeron canadensis.	
Streams and wet areas	
Arisaema triphyllum.	*Heracleum lanatum.*
Asarum canadense.	*Iris versicolor.*
Caulophyllum thalictroides.	*Mentha spicata.*
Cypripedium calceolus.	*Populus balsamifera.*
Eupatorium perfoliatum.	

Table 15-48. DERMATITIS WINTER

Forests	
Abies balsamea.	*Populus balsamifera.*
Heracleum lanatum.	
Fields and open areas	
Heracleum lanatum.	
Streams and wet areas	
Heracleum lanatum.	*Populus balsamifera.*

15. 16. DIAPHORETIC

Table 15-49. DIAPHORETIC **SPRING**

Forests	
Sassafras albidum.	*Scrophularia marilandica.*
Fields and open areas	
Marrubium vulgare.	
Streams and wet areas	
None	

Table 15-50. DIAPHORETIC **SUMMER**

Forests	
Angelica atropurpurea.	*Lobelia inflata.*
Aquilegia canadensis.	*Monarda fistulosa.*
Aralia spp.	*Scrophularia marilandica.*
Hedeoma pulegioides.	
Fields and open areas	
Achillea spp.	*Leonurus cardiaca.*
Aralia spp.	*Lobelia inflata.*
Arctium spp.	*Monarda fistulosa.*
Asclepias syriaca.	*Nepeta cataria.*
Streams and wet areas	
Angelica atropurpurea.	*Eupatorium perfoliatum.*
Aquilegia canadensis.	*Eupatorium purpureum.*

Table 15-51. DIAPHORETIC FALL

Forests	
Angelica atropurpurea.	*Arisaema triphyllum.*
Apocynum spp.	*Monarda fistulosa.*
Aralia spp.	
Fields and open areas	
Achillea spp.	*Asclepias tuberosa.*
Apocynum spp.	*Celastrus scandens.*
Aralia spp.	*Leonurus cardiaca.*
Arctium spp.	*Monarda fistulosa.*
Asclepias syriaca.	*Polygala senega.*
Streams and wet areas	
Angelica atropurpurea.	*Eupatorium perfoliatum.*
Arisaema triphyllum.	*Eupatorium purpureum.*
Asarum canadense.	

15. 17. DIURETIC

Table 15-52. DIURETIC SPRING

Forests	
Abies balsamea.	*Fraxinus americana.*
Chimaphila umbellata.	*Sassafras albidum.*
Dicentra spp.	*Scrophularia marilandica.*
Fields and open areas	
Capsella bursa-pastoris.	*Juniperus communis.*
Cichorium intybus.	*Taraxacum officinale.*
Fragaria virginiana.	
Streams and wet areas	
Galium aparine.	*Thuja occidentalis.*

Table 15-53. DIURETIC **SUMMER**

Forests

Abies balsamea.
Aquilegia canadensis.
Chimaphila umbellata.
Fraxinus americana.
Hydrastis canadensis.
Monarda fistulosa.
Scrophularia marilandica.

Fields and open areas

Arctium spp.
Asclepias syriaca.
Capsella bursa-pastoris.
Daucus carota.
Fragaria virginiana.
Helianthus annuus.
Hypericum perforatum.
Juniperus communis.
Lactuca scariola.
Monarda fistulosa.
Plantago major.
Taraxacum officinale.

Streams and wet areas

Aquilegia canadensis.
Eupatorium perfoliatum.
Eupatorium purpureum.
Galium aparine.
Thuja occidentalis.

Table 15-54. DIURETIC **FALL**

Forests

Abies balsamea.
Aletris farinosa.
Apocynum spp.
Arctostaphylos uva-ursi.
Chamaelirium lutem.
Chimaphila umbellata.
Dicentra spp.
Fraxinus americana.
Gaultheria procumbens.
Hydrastis canadensis.
Menispermum canadense.
Mitchella repens.
Monarda fistulosa.

Fields and open areas

Apocynum spp.
Arctium spp.
Arctostaphylos uva-ursi.
Asclepias syriaca.
Capsella bursa-pastoris.
Celastrus scandens.
Cichorium intybus.
Daucus carota.
Erigeron canadensis.
Fragaria virginiana.
Gaultheria procumbens.
Helianthus annuus.
Humulus lupulus.
Juniperus communis.
Lactuca scariola.
Monarda fistulosa.
Plantago major.
Polygala senega.
Taraxacum officinale.

Streams and wet areas

Caulophyllum thalictroides.
Chamaelirium lutem.
Eupatorium perfoliatum.
Eupatorium purpureum.
Iris versicolor.
Thuja occidentalis.

Table 15-55. DIURETIC WINTER

Forests	
Abies balsamea.	
Fields and open areas	
Juniperus communis.	*Taraxacum officinale.*
Streams and wet areas	
Thuja occidentalis.	

15. 18. EMMENAGOGUE

Table 15-56. EMMENAGOGUE SPRING

Forests	
Fraxinus americana	
Fields and open areas	
Juniperus communis.	
Streams and wet areas	
Thuja occidentalis.	

Table 15-57. EMMENAGOGUE SUMMER

Forests	
Fraxinus americana.	*Trillium erectum.*
Hedeoma pulegioides.	
Fields and open areas	
Juniperus communis.	*Nepeta cataria.*
Leonurus cardiaca.	*Tanacetum vulgare.*
Streams and wet areas	
Thuja occidentalis.	

Table 15-58. EMMENAGOGUE FALL

Forests	
Fraxinus americana.	*Trillium erectum.*
Gaultheria procumbens.	
Fields and open areas	
Gaultheria procumbens.	*Polygala senega.*
Juniperus communis.	*Tanacetum vulgare.*
Leonurus cardiaca.	
Streams and wet areas	
Caulophyllum thalictroides.	*Thuja occidentalis.*

Table 15-59. EMMENAGOGUE WINTER

Forests
None
Fields and open areas
Juniperus communis.
Streams and wet areas
Thuja occidentalis.

15. 19. EMMOLLIENT

Table 15-60. EMMOLLIENT SUMMER

Forests
None
Fields and open areas
Verbascum thapsus.
Streams and wet areas
None

Table 15-61. EMMOLLIENT FALL

Forests
None
Fields and open areas
Verbascum thapsus.
Streams and wet areas
None

15. 10. EXPECTORANT

Table 15-62. EXPECTORANT SPRING

Forests	
Adiantum spp.	*Prunus serotina.*
Pinus strobus.	*Sanguinaria canadensis.*
Populus balsamifera.	
Fields and open areas	
Marrubium vulgare.	
Streams and wet areas	
Populus balsamifera.	*Symplocarpus foetidus.*

Table 15-63. EXPECTORANT SUMMER

Forests	
Adiantum spp.	*Pinus strobus.*
Ceanothus americanus.	*Populus balsamifera.*
Lobelia inflata.	*Prunus serotina.*
Fields and open areas	
Asclepias syriaca.	*Helianthus annuus.*
Ceanothus americanus.	*Lobelia inflata.*
Streams and wet areas	
Populus balsamifera.	*Symplocarpus foetidus.*

Table 15-64. EXPECTORANT FALL

Forests	
Adiantum spp.	*Pinus strobus.*
Apocynum spp.	*Populus balsamifera.*
Arisaema triphyllum.	*Prunus serotina.*
Ceanothus americanus.	
Fields and open areas	
Apocynum spp.	*Ceanothus americanus.*
Asclepias syriaca.	*Helianthus annuus.*
Asclepias tuberosa.	*Polygala senega.*
Streams and wet areas	
Arisaema triphyllum.	*Symplocarpus foetidus.*
Populus balsamifera.	

Table 15-65. EXPECTORANT WINTER

Forests	
Pinus strobus.	*Prunus serotina.*
Populus balsamifera.	
Fields and open areas	
None	
Streams and wet areas	
Populus balsamifera.	

15. 21. FEBRIFUGE

TABLE 15-66. FEBRIFUGE SPRING

Forests
None
Fields and open areas
None
Streams and wet areas
Salix spp.

Table 15-67. FEBRIFUGE FALL

Forests
None
Fields and open areas
Berberis vulgaris.
Streams and wet areas
None

15. 22. FLATULENT

15. 23. GALACTAGOGUE

Table 15-68. GALACTAGOGUE FALL

Forests
Gaultheria procumbens.
Fields and open areas
Gaultheria procumbens.
Streams and wet areas
None

15. 24. HEMOSTATIC

Table 15-69. HEMOSTATIC SPRING

Forests
Hamamelis virginiana.
Fields and open areas
Rhus. spp.
Streams and wet areas
None

Table 15-70. HEMOSTATIC **SUMMER**

Forests
Hydrastis canadensis.
Fields and open areas
Rhus spp.
Streams and wet areas
None

Table 15-71. HEMOSTATIC **FALL**

Forests	
Hamamelis virginiana.	*Hydrastis canadensis.*
Fields and open areas	
Rhus spp.	
Streams and wet areas	
None	

15.25. HYPNOTIC

Table 15-72. HYPNOTIC **FALL**

Forests
None
Fields and open areas
Cannabis sativa.
Streams and wet areas
None

15. 26. HYPOGLYCEMIC

Table 15-73. HYPOGLYCEMIC **SPRING**

Forests	
Chimaphila umbellata.	*Geranium maculatum.*
Fields and open areas	
Geranium maculatum.	*Taraxacum officinale.*
Streams and wet areas	
None	

Table 15-74. HYPOGLYCEMIC **SUMMER**

Forests	
Chimaphila umbellata.	*Hydrastis canadensis.*
Fields and open areas	
Arctium spp.	*Taraxacum officinale.*
Helianthus annuus.	
Streams and wet areas	
Eupatorium purpureum.	*Lycopus virginicus.*

Table 15-75. HYPOGLYCEMIC **FALL**

Forests	
Chimaphila umbellata.	*Hydrastis canadensis.*
Geranium maculatum.	
Fields and open areas	
Arctium spp.	*Helianthus annuus.*
Geranium maculatum.	*Taraxacum officinale.*
Streams and wet areas	
Eupatorium purpureum.	*Lycopus virginicus.*

Table 15-76. HYPOGLYCEMIC WINTER

Forests
None
Fields and open areas
Taraxacum officinale.
Streams and wet areas
None

15. 27. INTOXICANT

Table 15-77. INTOXICANT SUMMER

Forests
None
Fields and open areas
Nepeta cataria.
Streams and wet areas
None

Table 15-78. INTOXICANT FALL

Forests
None
Fields and open areas
Cannabis sativa.
Streams and wet areas
None

15. 28. MUCILAGE

Table 15-79. MUCILAGE SPRING

Forests
Hepatica acutiloba.
Fields and open areas
None
Streams and wet areas
None

Table 15-80. MUCILAGE FALL

Forests
Aplectrum hymale.
Fields and open areas
None
Streams and wet areas
Aplectrum hymale.

15. 29. NARCOTIC

Table 15-81. NARCOTIC SPRING

Forests	
Aesculus hippocastanum.	*Sassafras albidum.*
Sanguinaria canadensis.	
Fields and open areas	
None	
Streams and wet areas	
Sarracenia purpurea.	*Symplocarpus foetidus.*

Table 15-82. NARCOTIC SUMMER

Forests	
Aesculus hippocastanum.	
Fields and open areas	
None	
Streams and wet areas	
Lycopus virginicus.	*Symplocarpus foetidus.*
Sarracenia purpurea.	

Table 15-83. NARCOTIC FALL

Forests	
Aesculus hippocastanum.	*Solanum dulcamara.*
Fields and open areas	
Celastrus scandens.	*Humulus lupulus.*
Streams and wet areas	
Lycopus virginicus.	*Symplocarpus foetidus.*
Sarracenia purpurea.	

Table 15-84. NARCOTIC WINTER

Forests
Aesculus hippocastanum.
Fields and open areas
None
Streams and wet areas
None

15. 30. NUTRITIVE

Table 15-85. NUTRITIVE SUMMER

Forests
None
Fields and open areas
Medicago sativa.
Streams and wet areas
None

Table 15-86. NUTRITIVE FALL

Forests
None
Fields and open areas
Medicago sativa.
Streams and wet areas
None

15. 31. PANACEA

Table 15-87. PANACEA SPRING

Forests
None
Fields and open areas
None
Streams and wet areas
Acorus calamus.

Table 15-88. PANACEA SUMMER

Forests
None

Fields and open areas
None

Streams and wet areas
Eupatorium perfoliatum.

Table 15-89. PANACEA FALL

Forests
Panax quinquefolius.

Fields and open areas
None

Streams and wet areas
Acorus calamus. *Eupatorium perfoliatum.*

15. 32. PARTURIFACIENT

Table 15-90. PARTURIFACIENT FALL

Forests
Mitchella repens.

Fields and open areas
None

Streams and wet areas
None

15. 33. PECTORAL

Table 15-91. PECTORAL **SPRING**

Forests	
Adiantum spp.	*Prunus serotina.*
Fields and open areas	
None	
Streams and wet areas	
None	

Table 15-92. PECTORAL **SUMMER**

Forests	
Adiantum spp.	*Prunus serotina.*
Aralia spp.	
Fields and open areas	
Aralia spp.	
Streams and wet areas	
None	

Table 15-93. PECTORAL **FALL**

Forests	
Adiantum spp.	*Aralia spp.*
Aplectrum hymale.	*Prunus serotina.*
Fields and open areas	
Aralia spp.	
Streams and wet areas	
Aplectrum hymale.	

Table 15-94. PECTORAL WINTER

Forests
Prunus serotina.
Fields and open areas
None
Streams and wet areas
None

15. 34. PHYSIC

Table 15-95. PHYSIC SPRING

Forests	
Dicentra spp.	*Prunella vulgaris.*
Fields and open areas	
Prunella vulgaris.	
Streams and wet areas	
None	

Table 15-96. PHYSIC SUMMER

Forests
Prunella vulgaris.
Fields and open areas
Prunella vulgaris.
Streams and wet areas
None

Table 15-97. PHYSIC FALL

Forests	
Dicentra spp.	*Prunella vulgaris.*
Fields and open areas	
Celastrus scandens.	*Prunella vulgaris.*
Streams and wet areas	
None	

15. 35. POISON

Table 15-98. POISON SPRING

Forests	
Actaea spp.	*Anemone canadensis.*
Aesculus hippocastanum.	*Fagus spp.*
Fields and open areas	
Capsella bursa-pastoris.	*Rhus spp.*
Streams and wet areas	
Alnus rugosa.	*Typha latifolia.*
Anemone canadensis.	

Table 15-99. POISON SUMMER

Forests	
Actaea spp.	*Aralia spp.*
Aesculus hippocastanum.	*Fagus spp.*
Aquilegia canadensis.	*Lobelia inflata.*
Fields and open areas	
Achillea spp.	*Comptonia peregrina.*
Aralia spp.	*Lobelia inflata.*
Capsella bursa-pastoris.	*Rhus spp.*
Streams and wet areas	
Alnus rugosa.	*Typha latifolia.*
Aquilegia canadensis.	

Table 15-100. POISON — FALL

Forests	
Actea spp.	*Fagus spp.*
Aesculus hippocastanum.	*Polygonatum biflorum.*
Aralia spp.	*Solanum dulcamara.*
Chamaelirium luteum.	
Fields and open areas	
Achillea spp.	*Celastrus scandens.*
Aralia spp.	*Comptonia peregrina.*
Baptisia tinctoria.	*Polygala senega.*
Cannabis sativa.	*Rhus spp.*
Capsella bursa-pastoris.	
Streams and wet areas	
Alnus rugosa.	*Chamaelirium luteum.*
Caulophyllum thalictroides.	*Typha latifolia.*

Table 15-101. POISON — WINTER

Forests	
Actaea spp.	*Fagus spp.*
Aesculus hippocastanum.	
Fields and open areas	
None	
Streams and wet areas	
Alnus rugosa.	*Typha latifolia.*

15. 36. REFRIGERANT

Table 15-102. REFRIGERANT — SPRING

Forests	
None	
Fields and open areas	
Fragaria virginiana.	*Rhus spp.*
Streams and wet areas	
Galium aparine.	

Table 15-103. REFRIGERANT SUMMER

Forests	
None	
Fields and open areas	
Fragaria virginiana.	*Rhus spp.*
Streams and wet areas	
Galium aparine.	

Table 15-104. REFRIGERANT FALL

Forests	
None	
Fields and open areas	
Fragaria virginiana.	*Rhus spp.*
Streams and wet areas	
None	

15. 37. RESOLVENT

Table 15-105. RESOLVENT FALL

Forests
Solanum dulcamara.
Fields and open areas
None
Streams and wet areas
None

15. 38. RUBEFACIENT

Table 15-106. RUBEFACIENT SPRING

Forests	
Abies balsamea.	*Juglans cinerea.*
Chimaphila umbellata.	
Fields and open areas	
None	
Streams and wet areas	
Juglans cinerea.	

Table 15-107. RUBEFACIENT SUMMER

Forests	
Abies balsamea.	*Juglans cinerea.*
Chimaphila umbellata.	
Fields and open areas	
None	
Streams and wet areas	
Juglans cinerea.	

Table 15-108. RUBEFACIENT FALL

Forests	
Abies balsamea.	*Juglans cinerea.*
Chimaphila umbellata.	
Fields and open areas	
None	
Streams and wet areas	
Juglans cinerea.	

Table 15-109. RUBEFACIENT — WINTER

Forests	
Abies balsamea.	*Juglans cinerea.*
Fields and open areas	
None	
Streams and wet areas	
Juglans cinerea.	

15. 39. SEDATIVE

Table 15-110. SEDATIVE — SPRING

Forests	
Cypripedium calceolus.	*Scutellaria lateriflora.*
Hamamelis virginiana.	*Viburnam opulus.*
Prunus serotina.	
Fields and open areas	
Chichorium intybus.	*Scutellaria lateriflora.*
Streams and wet areas	
Cypripedium calceolus.	*Scutellaria lateriflora.*

Table 15-111. SEDATIVE — SUMMER

Forests	
Ceanothus americanus.	*Scutellaria lateriflora.*
Prunus serotina.	*Viburnam opulus.*
Fields and opean areas	
Ceanothus americanus.	*Leonurus cardiaca.*
Cynoglossum officinale.	*Scutellaria lateriflora.*
Lactuca scariola.	*Trifolium pratense.*
Streams and wet areas	
Lycopus virginicus.	*Scutellaria lateriflora.*

Table 15-112. SEDATIVE FALL

Forests	
Altris farinosa.	*Mitchella repens.*
Ceanothus americanus.	*Prunus serotina.*
Cypripedium calceolus.	*Viburnam opulus.*
Hamamelis virginiana.	
Fields and open areas	
Cannabis sativa.	*Humulus lupulus.*
Ceanothus americanus.	*Lactuca scariola.*
Cichorium intybus.	*Leonurus cardiaca.*
Cynoglossum officinale.	*Trifolium pratense.*
Streams and wet areas	
Caulophyllum thalictroides.	*Lycopus virginicus.*
Cypripedium calceolus.	

Table 15-113. SEDATIVE WINTER

Forests	
Prunus serotina.	*Viburnam opulus.*
Fields and open areas	
None	
Streams and wet areas	
None	

15.40. SIALAGOGUE

Table 15-114. SIALAGOGUE FALL

Forests
None
Fields and open areas
Polygala senega.
Streams and wet areas
Iris versicolor.

15. 51. SPASMODIC

Table 15-115. SPASMODIC FALL

Forests
Panax quinquefolius.
Fields and open areas
None
Streams and wet areas
None

15. 42. STIMULANT

Table 15-116. STIMULANT SPRING

Forests	
Abies balsamea.	*Populus balsamifera.*
Heracleum lanatum.	*Sassafras albidum.*
Fields and open areas	
Betula allenghaniensis.	*Juniperus communis.*
Heracleum lanatum.	*Marrubium vulgare.*
Streams and wet areas	
Acorus calamus.	*Populus balsamifera.*
Heracleum lanatum.	*Symplocarpus foetidus.*
Mentha piperita.	*Thuja occidentalis.*
Mentha spicata.	

Table 15-117. STIMULANT **SUMMER**

Forests

Abies balsamea.
Angelica atropurpurea.
Aralia spp.
Ceanothus americanus.
Hedeoma pulegioides.
Heracleum lanatum.
Hydrastis canadensis.
Monarda fistulosa.
Populus balsamifera.

Fields and open areas

Achillea spp.
Aralia spp.
Artemisia absinthium.
Betula allenghaniensis.
Ceanothus americanus.
Daucus carota.
Heracleum lanatum.
Hypericum perforatum.
Juniperus communis.
Leonurus cardiaca.
Monarda fistulosa.
Nepeta cataria.
Tanacetum vulgare.

Streams and wet areas

Angelica atropurpurea.
Heracleum lanatum.
Mentha piperita.
Mentha spicata.
Populus balsamifera.
Symplocarpus foetidus.
Thuja occidentalis.

Table 15-118. STIMULANT **FALL**

Forests

Abies balsamea.
Angelica atropurpurea.
Apocynum spp.
Aralia spp.
Ceanothus americanus.
Gaultheria procumbens.
Heracleum lanatum.
Hydrastis canadensis.
Monarda fistulosa.
Panax quinquefolius.
Populus balsamifera.

Fields and open areas

Achillea spp.
Apocynum spp.
Aralia spp.
Artemisia absinthium.
Berberis vulgaris.
Betula allenghaniensis.
Ceanothus americanus.
Daucus carota.
Gaultheria procumbens.
Heracleum lanatum.
Juniperus communis.
Leonurus cardiaca.
Monarda fistulosa.
Tanacetum vulgare.

Streams and wet areas

Acorus calamus.
Angelica atropurpurea.
Asarum canadense.
Heracleum lanatum.
Mentha piperta.
Mentha spicata.
Populus balsamifera.
Symplocarpus foetidus.
Thuja occidentalis.

Table 15-119. STIMULANT — WINTER

Forests	
Abies balsamea.	*Populus balsamifera.*
Heracleum lanatum.	
Fields and open areas	
Betula allenghaniensis.	*Juniperus communis.*
Heracleum lanatum.	
Streams and wet areas	
Heracleum lanatum.	*Thuja occidentalis.*
Populus balsamifera.	

15. 43. STOMACHIC

Table 15-120. STOMACHIC — SPRING

Forests	
Chimaphila umbellata.	*Coptis groenlandica.*
Fields and open areas	
None	
Streams and wet areas	
Coptis groenlandica.	*Sarracenia purpurea.*
Mentha piperita.	

Table 15-121. STOMACHIC — SUMMER

Forests	
Chimaphila umbellata.	*Osmorhiza longistylis.*
Coptis groenlandica.	
Fields and open areas	
Artemisia absinthium.	
Streams and wet areas	
Coptis groenlandica.	*Sarracenia purpurea.*
Mentha piperita.	

Table 15-122. STOMACHIC — FALL

Forests	
Chimaphila umbellata.	*Osmorhiza longistylis.*
Coptis groenlandica.	*Panax quinquefolius.*
Fields and open areas	
Artemesia absinthium.	*Humulus lupulus.*
Streams and wet areas	
Coptis groenlandica.	*Sarracenia purpurea.*
Mentha piperita.	

15. 44. STYPTIC

Table 15-123. STYPTIC — SPRING

Forests	
Geranium maculatum.	*Prunella vulgaris.*
Fields and open areas	
Geranium maculatum.	*Prunella vulgaris.*
Streams and wet areas	
Symplocarpus foetidus.	

Table 15-124. STYPTIC — SUMMER

Forests
Prunella vulgaris.
Fields and open areas
Prunella vulgaris.
Streams and wet areas
Symplocarpus foetidus.

Table 15-125. STYPTIC — FALL

Forests	
Geranium maculatum.	*Prunella vulgaris.*
Fields and open areas	
Geranium maculatum.	*Prunella vulgaris.*
Streams and wet areas	
Symplocarpus foetidus.	

15. 45. SUDORIFIC

Table 15-126. SUDORIFIC — SPRING

Forests
Chimaphila umbellata.
Fields and open areas
None
Streams and wet areas
None

Table 15-127. SUDORIFIC — SUMMER

Forests
Chimaphila umbellata.
Fields and open areas
None
Streams and wet areas
None

Table 15-128. SUDORIFIC FALL

Forests
Chimaphila umbellata.
Fields and open areas
None
Streams and wet areas
None

15. 46. VASOPRESSOR

Table 15-129. VASOPRESSOR SPRING

Forests
Aesculus hippocastanum.
Fields and open areas
None
Streams and wet areas
None

Table 15-130. VASOPRESSOR SUMMER

Forests
Aesculus hippocastanum.
Fields and open areas
None
Streams and wet areas
None

Table 15-131. VASOPRESSOR FALL

Forests
Aesculus hippocastanum.
Fields and open areas
Humulus lupulus.
Streams and wet areas
None

Table 15-132. VASOPRESSOR WINTER

Forests
Aesculus hippocastanum.
Fields and open areas
None
Streams and wet areas
None

15. 47. VENEREAL

Table 15-133. VENEREAL SPRING

Forests
Decentra spp.
Fields and open areas
None
Streams and wet areas
None

Table 15-134. VENEREAL FALL

Forests
Dicentra spp.
Fields and open areas
Celastrus scandens.
Streams and wet areas
None

15. 48. VERMIFUGE

Table 15-135. VERMIFUGE SPRING

Forests	
Juglans cinerea.	*Juglans nigra.*
Fields and open areas	
None	
Streams and wet areas	
Juglans cinerea.	

Table 15-136. VERMIFUGE SUMMER

Forests	
Juglans cinerea.	*Juglans nigra.*
Fields and open areas	
None	
Streams and wet areas	
Juglans cinerea.	

Table 15-137. VERMIFUGE FALL

Forests	
Juglans cinerea.	*Juglans nigra.*
Fields and open areas	
None	
Streams and wet areas	
Iris versicolor.	*Juglans cinerea.*

Table 15-138. VERMIFUGE WINTER

Forests
Juglans cinerea.
Fields and open areas
None
Streams and wet areas
Juglans cinerea.

15. 49. VESICANT

Table 15-139. VESICANT SPRING

Forests
Chimaphila umbellata.
Fields and open areas
None
Streams and wet areas
None

Table 15-140. VESICANT SUMMER

Forests
Chimaphila umbellata.

Fields and open areas
None

Streams and wet areas
None

Table 15-141. VESICANT FALL

Forests
Chimaphila umbellata.

Fields and open areas
None

Streams and wet areas
None

15. 50. VITAMIN

Table 15-142. VITAMIN SPRING

Forests	
Pinus strobus.	*Viburnam opulus.*
Fields and open areas	
None	
Streams and wet areas	
Mentha piperita.	*Typha latifolia.*
Nasturtium officinale.	

Table 15-143. VITAMIN — SUMMER

Forests	
Pinus strobus.	*Viburnam opulus.*
Fields and open areas	
Medicago sativa.	
Streams and wet areas	
Mentha piperita.	*Typha latifolia.*
Nasturtium officinale.	

Table 15-144. VITAMIN — FALL

Forests	
Pinus strobus.	*Viburnam opulus.*
Fields and open areas	
Berberis vulgaris.	*Medicago sativa.*
Streams and wet areas	
Mentha piperita.	*Typha latifolia.*
Nasturtium officinale.	

Table 15-145. VITAMIN — WINTER

Forests	
Pinus strobus.	*Viburnam opulus.*
Fields and open areas	
None	
Streams and wet areas	
Nasturtium officinale.	*Typha latifolia.*

15. 51. VULNERARY

Table 15-146. VULNERARY SUMMER

Forests
None
Fields and open areas
Plantago major.
Streams and wet areas
None

Table 15-147. VULNERARY FALL

Forests
None
Fields and open areas
Plantago major.
Streams and wet areas
None

16. EDIBLE PLANTS

Table 16-1. EDIBLE PLANTS — SPRING

Forests

Allium tricoccum.
Arctostaphalos uva-ursi.
Asarum canadense.
Claytonia virginica.
Coptis groenlandica.
Erythronium americanum.
Galium aparine.
Gaultheria procumbens.
Ledum groenlandicum.
Osmunda cinnomonea.
Pinus strobus.
Viola papilionaceae.

Fields and open areas

Amaranthus retroflexus.
Arctostaphalos uva-ursi.
Asclepias syriaca.
Asparagus officinale.
Capsella bursa-pastoris.
Chenopodium album.
Cichorium intybus.
Comptonia peregrina.
Fragaria virginica.
Gaultheria procumbens.
Lactuca canadensis.
Polygonum cuspidatium.
Rumex acetosella.
Rumex crispus.
Taraxacum officinale.
Urtica dioica.

Streams and wet areas

Asarum canadense.
Barbarea vulgaris.
Caltha palustris.
Galium aparine.
Ledum groenlandicum.
Mentha piperita.
Nasturtium officinale.
Osmunda cinnomonea.
Typha latifolia.

Table 16-2. EDIBLE PLANTS SUMMER

Forests

Allium tricoccum.
Amelanchier arborea.
Aralia nudicalus.
Arctostaphalos uva-ursi.
Asarum canadense.
Coptis groenlandica.
Galium aparine.
Ledum groenlandicum.
Leonurus cardiaca.
Pinus strobus
Vaccinum angustifolium.

Fields and open areas

Achillea millefolium.
Amelanchier arborea.
Arctium minus.
Arctostaphalos uva-ursi.
Artemesia absinthium.
Asclepias syriaca.
Chenopodium album.
Comptonia peregrina.
Fragaria virginica.
Geum rivale.
Hemerocallis fulva.
Verbascum thapsus.
Leonurus cardiaca.
Matricaria matricarioides.
Monarda fistulosa.
Nepeta cataria.
Rhus typhina.
Rubus parviflorus.
Rubus idaeus
Rubus occidentalis.
Taraxacum officinale.
Trifolium pratense.
Vaccinum angustifolium.

Streams and wet areas

Asarum canadense.
Galium aparine.
Ledum groenlandicum.
Mentha piperita.
Typha latifolia.

Table 16-3 EDIBLE PLANTS FALL

Forests

Aralia nudicalus.
Arctostaphalos uva-ursi.
Asarum canadense.
Coptis groenlandica.
Corylus cornuta.
Gaultheria procumbens.
Ledum groenlandicum.
Leonurus cardiaca.
Malus spp.
Pinus strobus.
Rosa spp.
Sorbus americana.
Viburnam trilobum.

Fields and open areas

Achillea millefolium.
Arctostaphalos uva-ursi.
Arctium minus.
Artemesia absinthium.
Chenopodium album.
Cichorium intybus.
Comptonia peregrina.
Daucus carota.
Gaultheria procumbens.
Geum rivale.
Helianthus annus.
Leonurus cardiaca.
Malus spp.
Matricaria matricarioides.
Monarda fistulosa.
Nepeta cataria.
Rosa spp.
Rumex crispus.
Sorbus americana.
Tanacetum vulgare.
Taraxacum officinale.
Trifolium pratense.
Verbascum thapsus.

Streams and wet areas

Asarum canadense.
Ledum groenlandicum.
Mentha piperita.
Sagittaria latifolia.
Typha latifolia.
Vaccinium macrocarpon.
Viburnam trilobum.

Table 16-4. EDIBLE PLANTS WINTER

Forests

Arctostaphalos uva-ursi.
Ledum groenlandicum.
Pinus strobus.
Rosa spp.
Sorbus americana.

Fields and open areas

Arctostaphalos uva-ursi.
Rosa spp.
Sorbus americana.

Streams and wet areas.

Barbarea vulgaris.
Ledum groenlandicum.

Abies balsamea . . . . . *Balsam fir.*
Abies balsamea . . . . . *Balsam.*
Achillea spp. . . . . . *Yarrow.*
Achillea spp. . . . . . *Milfoil.*
Achillea spp. . . . . . *Yarroway.*
Acorus calamus . . . . . *Sweet flag.*
Acorus calamus . . . . . *Calamus.*
Actea spp . . . . . *Doll's eyes.*
Actea spp . . . . . *Baneberry.*
Adiantum spp . . . . . *Maiden hair fern.*
Aesculus hippocastanum . . . . . *Horse chesnut.*
Aesculus hippocastanum . . . . . *Buckeye.*
Aletris farinosa . . . . . *Colic root.*
Aletris farinosa . . . . . *Star grass.*
Aletris farinosa . . . . . *Unicorn plant.*
Allium tricoccum . . . . . *Wild onion.*
Allium tricoccum . . . . . *Leek.*
Allium tricoccum . . . . . *Wild garlic.*
Alnus rugosa . . . . . *Tag alder*
Alnus rugosa . . . . . *Swamp alder.*
Alnus rugosa . . . . . *Speckled alder.*
Anaphalis margaritacea . . . . . *Pearly everlasting.*
Anemone canadensis . . . . . *Canada anemone.*
Angelica atropurpurea . . . . . *Angelica.*
Angelica atropurpurea . . . . . *Purplestem angelica.*
Angelica atropurpurea . . . . . *Masterwort.*
Aplectrum hymale . . . . . *Putty-root.*
Aplectrum hymale . . . . . *Adam-and-eve root.*
Apocynum spp . . . . . *Indian hemp.*
Apocynum spp . . . . . *Dogbane.*
Apocynum spp . . . . . *Milkweed.*
Apocynum spp . . . . . *Colicroot.*
Aquilegia canadensis . . . . . *Columbine.*
Aquilegia canadensis . . . . . *Rockbells.*
Aquilegia canadensis . . . . . *Meetinghouses.*
Aralia spp . . . . . *Wild sarsparilla.*
Aralia spp . . . . . *Spignet (a. Nudicaulis)*
Arctium spp . . . . . *Burdock.*
Arctium spp . . . . . *Stickers.*
Arctium spp . . . . . *Clotbur.*
Arctium spp . . . . . *Harebur.*

Arctium spp . . . . . *Burrseed.*
Arctium spp . . . . . *Gobo.*
Arctostaphylos uva-ursi . . . . . *Bearberry.*
Arctostaphylos uva-ursi . . . . . *Kinnikinick.*
Arctostaphylos uva-ursi . . . . . *Uva-ursi.*
Arisamea triphyllum . . . . . *Jack-in-the-pulpit.*
Arisamea triphyllum . . . . . *Dragon root.*
Arisamea triphyllum . . . . . *Indian turnip.*
Arisamea triphyllum . . . . . *Wake robin.*
Artemesia absinthium . . . . . *Wormwood.*
Artemesia absinthium . . . . . *Absinthe.*
Asarum canadense . . . . . *Wild ginger.*
Asarum canadense . . . . . *Black snakeroot.*
Asarum canadense . . . . . *Coltsfoot.*
Asarum canadense . . . . . *Brod-Leaved sarabacca.*
Asclepias syrica . . . . . *Milkwee.*
Asclepias syrica . . . . . *Silkweed.*
Asclepias tuberosa . . . . . *Butterfly weed.*
Asclepias tuberosa . . . . . *Pleurisy root.*
Baptisia tinctoria . . . . . *Wild indigo.*
Baptisia tinctoria . . . . . *Rattleweed.*
Baptisia tinctoria . . . . . *Clover bloom.*
Baptisia tinctoria . . . . . *Yellow broom.*
Berberis vulgaris . . . . . *Barberry.*
Betula allenghaniensis . . . . . *Yellow birch.*
Cannabis sativa . . . . . *Hemp.*
Cannabis sativa . . . . . *Marijuana.*
Cannabis sativa . . . . . *Reefer.*
Cannabis sativa . . . . . *Pot.*
Capsella bursa-pastoris . . . . . *Shepard's purse.*
Capsella bursa-pastoris . . . . . *Case weed.*
Capsella bursa-pastoris . . . . . *Shovel weed.*
Caulophyllum thalictroides . . . . . *Blue cohosh.*
Caulophyllum thalictroides . . . . . *Papoose root.*
Caulophyllum thalictroides . . . . . *Blueberry.*
Ceanothus americanus . . . . . *Red root.*
Ceanothus americanus . . . . . *New jersey tea.*
Celastrus scandens . . . . . *Climbing bittersweet.*
Celastrus scandens . . . . . *Bittersweet.*
Celastrus scandens . . . . . *Climbing orange root.*
Celastrus scandens . . . . . *Waxwork.*
Chamaelirium lutem . . . . . *Blazing star.*
Chamaelirium lutem . . . . . *Helonias.*

Chamaelirium lutem . . . . . *Devil's bit.*
Chamaelirium lutem . . . . . *Star root.*
Chamaelirium lutem . . . . . *False unicorn.*
Chelone glabra. . . . . . *Turtle head.*
Chelone glabra. . . . . . *Balmony.*
Chelone glabra. . . . . . *Snakehead.*
Chimaphila umbellata . . . . . *Prince's pine.*
Chimaphila umbellata . . . . . *Pipsissewa.*
Cichorium intybus. . . . . . *Chicory.*
Cichorium intybus. . . . . . *Succory.*
Comptonia peregrina. . . . . . *Sweet fern.*
Comptonia peregrina. . . . . . *Ferngale.*
Comptonia peregrina. . . . . . *Canadian sweet gale.*
Coptis groenlandica. . . . . . *Gold thread.*
Coptis groenlandica. . . . . . *Canker root.*
Corallorhiza spp . . . . . *Coral root.*
Corallorhiza spp . . . . . *Spotted coral root.*
Corallorhiza spp . . . . . *Crawley.*
Cynoglossum officinale . . . . . *Hound's tongue.*
Cypripedium calceolus . . . . . *Lady's slipper.*
Cypripedium calceolus . . . . . *Moccasin flower.*
Cypripedium calceolus . . . . . *Nerve root.*
Cypripedium calceolus . . . . . *Yellow lady's slipper.*
Daucus carota . . . . . *Wild carrot.*
Daucus carota . . . . . *Queen anne's lace.*
Dicentra spp . . . . . *Squirrel corn.*
Dicentra spp . . . . . *Dutchman's breeches.*
Epigaea repens. . . . . . *Trailing arbutus.*
Epigaea repens. . . . . . *Ground laurel.*
Epigaea repens. . . . . . *Mayflower.*
Erigeron canadensis. . . . . . *Fleabane.*
Erigeron canadensis. . . . . . *Horseweed.*
Erigeron canadensis. . . . . . *Butterweed.*
Erigeron canadensis. . . . . . *Horsetail fleabane.*
Erythronium americanum . . . . . *Trout lily.*
Erythronium americanum . . . . . *Dog toothed violet.*
Eupatorium perfoliatum . . . . . *Boneset.*
Eupatorium perfoliatum . . . . . *Thoroughwort.*
Eupatorium purpureum. . . . . . *Joe-pye weed.*
Fagus spp . . . . . *Beech.*
Fragaria virginiana. . . . . . *Strawberry.*
Fraxinus americana . . . . . *Ash.*
Fraxinus americana . . . . . *White ash.*
Galium aparine . . . . . *Cleavers.*

Galium aparine . . . . . *Clivers.*
Galium aparine . . . . . *Goos grass.*
Galium aparine . . . . . *Bedstraw.*
Gaultheria procumbens . . . . . *Wintergreen.*
Gaultheria procumbens . . . . . *Teaberry.*
Gaultheria procumbens . . . . . *Checkerberry.*
Geranium maculatum . . . . . *Wild geranium.*
Geranium maculatum . . . . . *Alum root.*
Geranium maculatum . . . . . *Crane's bill.*
Geum rivale . . . . . *Purple water avens.*
Geum rivale . . . . . *Chocolate root.*
Geum rivale . . . . . *Avens.*
Hamamelis virginiana . . . . . *Witch hazel.*
Hedeoma pulegiodes . . . . . *American pennyroyal.*
Hedeoma pulegiodes . . . . . *Mock pennyroyal.*
Helianthus annuus . . . . . *Common sunflower.*
Hepatica acutiloba . . . . . *Liverleaf.*
Hepatica acutiloba . . . . . *Hepatica.*
Hepatica acutiloba . . . . . *Liverwort.*
Hepatica acutiloba . . . . . *Sharp-lobed hepatica.*
Heracleum lanatum . . . . . *Cow parsnip.*
Heracleum lanatum . . . . . *Masterwort.*
Humulus lupulus . . . . . *Hops.*
Hydrastis canadensis . . . . . *Golden seal.*
Hydrastis canadensis . . . . . *Yellow puccoon.*
Hydrastis canadensis . . . . . *Yellowroot.*
Hydrastis canadensis . . . . . *Orangeroot.*
Hypericum perforatum . . . . . *Saint john's wort.*
Iris versicolor . . . . . *Blue flag.*
Iris versicolor . . . . . *Wild iris.*
Iris versicolor . . . . . *Fleur-de-lys.*
Juglans cinera . . . . . *Butternut.*
Juglans cinera . . . . . *White walnut.*
Juglans nigra . . . . . *Black walnut.*
Juniperus communis . . . . . *Juniper.*
Lactuca scariola . . . . . *Prickly lettuce.*
Leonurus cardiaca . . . . . *Motherwort.*
Lithospermum canescens . . . . . *Hoary puccoon.*
Lithospermum canescens . . . . . *Indian paint.*
Lobelia inflata . . . . . *Indian tobacco.*
Lobelia inflata . . . . . *Lobelia.*
Lobelia inflata . . . . . *Wild tobacco.*
Lycopus virginicus . . . . . *Bugleweed.*
Lycopus virginicus . . . . . *Water-horehound.*

Marrubium vulgare . . . . . *Horehound.*
Matricaria matricariodes . . . . . *Pineapple weed.*
Matricaria matricariodes . . . . . *Wild chamomile.*
Medicago sativa . . . . . *Alfalfa.*
Medicago sativa . . . . . *Lucerne.*
Menispermum canadense . . . . . *Canada moonseed.*
Menispermum canadense . . . . . *Yellow parilla.*
Mentha piperta . . . . . *Peppermint.*
Mentha spicata . . . . . *Spearmint.*
Mitchella repens . . . . . *Partridge berry.*
Mitchella repens . . . . . *Squaw plum.*
Mitchella repens . . . . . *Squaw vine.*
Monarda fistulosa . . . . . *Wild bergamont.*
Monarda fistulosa . . . . . *Wild oregano.*
Monotropa uniflora . . . . . *Indian pipe.*
Monotropa uniflora . . . . . *Corpse-plant.*
Monotropa uniflora . . . . . *Convulsion-root.*
Monotropa uniflora . . . . . *Fits-root.*
Nasturtium officinale . . . . . *Watercress.*
Nepeta cataria . . . . . *Catnip.*
Nepeta cataria . . . . . *Catmint.*
Osmorhiza longistylis . . . . . *Anise-root.*
Osmorhiza longistylis . . . . . *Sweet cicely.*
Panax quinquefolius . . . . . *Ginseng.*
Panax quinquefolius . . . . . *Sang.*
Pinus strobus . . . . . *White pine.*
Plantago major . . . . . *Plantain.*
Plantago major . . . . . *Whiteman's foot.*
Polygala senega . . . . . *Seneca-snakeroot.*
Polygonatum biflorum . . . . . *Solomon's seal.*
Populus balsamifera . . . . . *Balsam popular.*
Populus balsamifera . . . . . *Hackmatack.*
Prunella vulgaris . . . . . *Self-heal.*
Prunella vulgaris . . . . . *Heal-all.*
Prunella vulgaris . . . . . *Carpenter-weed.*
Prunus serotina . . . . . *Black cherry.*
Prunus serotina . . . . . *Wild sherry.*
Prunus serotina . . . . . *Rum cherry.*
Pyrola routundifolia . . . . . *Shinleaf.*
Pyrola routundifolia . . . . . *Wintergreen.*
Pyrola routundifolia . . . . . *Round-leaved pyrola.*
Rhus spp . . . . . *Staghorn sumac.*

Rubus spp . . . . . *Raspberry and blackberry.*
Rumex crispus. . . . . . *Yellow dock.*
Rumex crispus. . . . . . *Curly dock.*
Salix spp . . . . . *Black willow.*
Sanguinaria canadensis . . . . . *Bloodroot.*
Sanguinaria canadensis . . . . . *Red puccoon.*
Sarracenia purpurea. . . . . . *Pitcher-plant.*
Sarracenia purpurea. . . . . . *Sidesaddle flower.*
Sarracenia purpurea. . . . . . *Huntsman's cup.*
Sassafrass albidum . . . . . *Sassafrass.*
Scrophularia marilandica. . . . . . *Maryland figwort.*
Schrophularia marilandica. . . . . . *Scrofula plant.*
Scrophularia marilandica. . . . . . *Carpenter's square.*
Scrophularia marilandica. . . . . . *Pilewort.*
Scutellaria lateriflora. . . . . . *Mad-dog skullcap.*
Scutellaria lateriflora. . . . . . *Mad-dog weed.*
Solanum dulcamara. . . . . . *Bittersweet.*
Solanum dulcamara. . . . . . *Nightshade.*
Symplocarpus foetidus. . . . . . *Skunk cabbage.*
Symplocarpus foetidus. . . . . . *Dracontium.*
Tanacetum vulgare . . . . . *Tansy.*
Tanacetum vulgare . . . . . *Golden-buttons.*
Taraxacum officinale. . . . . . *Dandelion.*
Thuja occidentalis . . . . . *White cedar.*
Thuja occidentalis . . . . . *Arbor-vitae.*
Trifolium pratense. . . . . . *Red clover.*
Trifolium pratense. . . . . . *Cleavergrass.*
Trillium erectum . . . . . *Stinking benjamin.*
Trillium erectum . . . . . *Purple trillium.*
Trillium erectum . . . . . *Squawroot.*
Typha latifolia. . . . . . *Cattail.*
Typha latifolia. . . . . . *Bulrush.*
Typha latifolia. . . . . . *Flag.*
Verbascum thapsus . . . . . *Mullein.*
Verbascum thapsus . . . . . *Flannel-plant.*
Verbascum thapsus . . . . . *Aaron's rod.*
Verbascum thapsus . . . . . *Indian tobacco.*
Viburnam opulus. . . . . . *Highbush cranberry.*
Viburnam opulus. . . . . . *Geulder-rose.*
Viburnam opulus. . . . . . *Cramp bark.*
Viburnam trilobum . . . . . *Highbush-cranberry.*
Viburnam trilobum . . . . . *Pimbina.*

Aaron's rod . . . . . *Verbascum thapsus.*
Absinthe . . . . . *Artemesia absinthium.*
Adam-and-eve root . . . . . *Aplectrum hymale.*
Alfalfa . . . . . *Medicago sativa.*
Alum root . . . . . *Geranium maculatum.*
American pennyroyal . . . . . *Hedeoma pulegiodes.*
Angelica . . . . . *Angelica atropurpurea.*
Anise-root . . . . . *Osmorhiza longistylis.*
Arbor-vitae . . . . . *Thuja occidentalis.*
Ash . . . . . *Fraxinus americana.*
Avens . . . . . *Geum rivale.*
Balmony . . . . . *Chelone glabra.*
Balsam fir . . . . . *Abies balsamea.*
Balsam popular . . . . . *Populus balsamifera.*
Balsam . . . . . *Abies balsamea.*
Baneberry . . . . . *Actea spp.*
Barberry . . . . . *Berberis vulgaris.*
Bearberry . . . . . *Arctostaphylos uva-ursi.*
Bedstraw . . . . . *Galium aparine.*
Beech . . . . . *Fagus spp.*
Bittersweet . . . . . *Celastrus scandens.*
Bittersweet . . . . . *Solanum dulcamara.*
Black cherry . . . . . *Prunus serotina.*
Black snakeroot . . . . . *Asarum canadense.*
Black walnut . . . . . *Juglans nigra.*
Black willow . . . . . *Salix spp.*
Blazing star . . . . . *Chamaelirium lutem.*
Bloodroot . . . . . *Sanguinaria canadensis.*
Blue cohosh . . . . . *Caulophyllum thalictroides.*
Blue flag . . . . . *Iris versicolor.*
Blueberry . . . . . *Caulophyllum thalictroides.*
Boneset . . . . . *Eupatorium perfoliatum.*
Broad-leaved sarabacca . . . . . *Asarum canadense.*
Buckeye . . . . . *Aesculus hippocastanum.*
Bugleweed . . . . . *Lycopus virginicus.*
Bulrush . . . . . *Typha latifolia.*
Burdock . . . . . *Arctium spp.*
Burrseed . . . . . *Arctium spp.*
Butterfly weed . . . . . *Asclepias tuberosa.*
Butternut . . . . . *Juglans cinera.*
Butterweed . . . . . *Erigeron canadensis.*
Calamus . . . . . *Acorus calamus.*

Canada anemone . . . . . *Anemone canadensis.*
Canada moonseed . . . . . *Menispermum canadense.*
Canadian sweet gale . . . . . *Comptonia peregrina.*
Canker root . . . . . *Coptis groenlandica.*
Carpenter-weed . . . . . *Prunella vulgaris.*
Carpenter's square . . . . . *Scrophularia marilandica.*
Case weed . . . . . *Capsella bursa-pastoris.*
Catmint . . . . . *Nepeta cataria.*
Catnip . . . . . *Nepeta cataria.*
Cattail . . . . . *Typha latifolia.*
Checkerberry . . . . . *Gaultheria procumbens.*
Chicory . . . . . *Cichorium intybus.*
Chocolate root . . . . . *Geum rivale.*
Cleavergrass . . . . . *Trifolium pratense.*
Cleavers . . . . . *Galium aparine.*
Climbing bittersweet . . . . . *Celastrus scandens.*
Climbing orange root . . . . . *Celastrus scandens.*
Clivers . . . . . *Galium aparine.*
Clotbur . . . . . *Arctium spp.*
Clover bloom . . . . . *Baptisia tinctoria.*
Colic root . . . . . *Aletris farinosa.*
Colicroot . . . . . *Apocynum spp.*
Coltsfoot . . . . . *Asarum canadense.*
Columbine . . . . . *Aquilegia canadensis.*
Common sunflower . . . . . *Helianthus annuus.*
Convulsion-root . . . . . *Monotropa uniflora.*
Coral root . . . . . *Corallorhiza spp.*
Corpse-plant . . . . . *Monotropa uniflora.*
Cow parsnip . . . . . *Heracleum lanatum.*
Cramp bark . . . . . *Viburnam opulus.*
Crane's bill . . . . . *Geranium maculatum.*
Crawley . . . . . *Corallorhiza spp.*
Curly dock . . . . . *Rumex crispus.*
Dandelion . . . . . *Taraxacum officinale.*
Devil's bit . . . . . *Chamaelirium lutem.*
Dog toothed violet . . . . . *Erythronium americanum.*
Dogbane . . . . . *Apocynum spp.*
Doll's eyes . . . . . *Actea spp.*
Dragon root . . . . . *Arisamea triphyllum.*
Dutchman's breeches . . . . . *Dicentra spp.*
False unicorn . . . . . *Chamaelirium lutem.*
Ferngale . . . . . *Comptonia peregrina.*
Fits-root . . . . . *Monotropa uniflora.*

Flag ..... *Typha latifolia.*
Flannel-plant ..... *Verbascum thapsus.*
Fleabane ..... *Erigeron canadensis.*
Fleur-de-lys ..... *Iris versicolor.*
Geulder-rose ..... *Viburnam opulus.*
Ginseng ..... *Panax quinquefolius.*
Gobo ..... *Arctium spp.*
Gold thread ..... *Coptis groenlandica.*
Golden seal ..... *Hydrastis canadensis.*
Golden-buttons ..... *Tanacetum vulgare.*
Goose grass ..... *Galium aparine.*
Ground laurel ..... *Epigaea repens.*
Hackmatack ..... *Populus balsamifera.*
Harebur ..... *Arctium spp.*
Heal-all ..... *Prunella vulgaris.*
Helonias ..... *Chamaelirium lutem.*
Hemp ..... *Cannabis sativa.*
Hepatica ..... *Hepatica acutiloba.*
Highbush cranberry ..... *Viburnam opulus.*
Hoary puccoon ..... *Lithospermum canescens.*
Hops ..... *Humulus lupulus.*
Horehound ..... *Marrubium vulgare.*
Horse chesnut ..... *Aesculus hippocastanum.*
Horsetail fleabane ..... *Erigeron canadensis.*
Horseweed ..... *Erigeron canadensis.*
Hound's tongue ..... *Cynoglossum officinale.*
Huntsman's cup ..... *Sarracenia purpurea.*
Indian hemp ..... *Apocynum spp.*
Indian paint ..... *Lithospermum canescens.*
Indian pipe ..... *Monotropa uniflora.*
Indian tobacco ..... *Lobelia inflata.*
Indian tobacco ..... *Verbascum thapsus.*
Indian turnip ..... *Arisamea triphyllum.*
Jack-in-th-pulpit ..... *Arisamea triphyllum.*
Joe-pye weed ..... *Eupatorium purpureum.*
Juniper ..... *Juniperus communis.*
Kinnikinick ..... *Arctostaphylos uva-ursi.*
Lady's slipper ..... *Cypripedium calceolus.*
Leek ..... *Allium tricoccum.*
Liverleaf ..... *Hepatica acutiloba.*
Liverwort ..... *Hepatica acutiloba.*
Lobelia ..... *Lobelia inflata.*
Lucerne ..... *Medicago sativa.*
Mad-dog skullcap ..... *Scutellaria lateriflora.*

Mad-dog weed . . . . . *Scutellaria lateriflora.*
Maiden hair fern . . . . . *Adiantum spp.*
Marijuana . . . . . *Cannabis sativa.*
Maryland figwort . . . . . *Scrophularia marilandica.*
Masterwort . . . . . *Angelica atropurpurea.*
Masterwort . . . . . *Heracleum lanatum.*
Mayflower . . . . . *Epigaea repens.*
Meetinghouses . . . . . *Aquilegia canadensis.*
Milfoil . . . . . *Achillea spp.*
Milkweed . . . . . *Asclepias syrica.*
Milkweed . . . . . *Apocynum spp.*
Moccasin flower . . . . . *Cypripedium calceolus.*
Mock pennyroyal . . . . . *Hedeoma pulegiodes.*
Motherwort . . . . . *Leonurus cardiaca.*
Mullein . . . . . *Verbascum thapsus.*
Nerve root . . . . . *Cypripedium calceolus.*
New jersey tea . . . . . *Ceanothus americanus.*
Nightshade . . . . . *Solanum dulcamara.*
Orangeroot . . . . . *Hydrastis canadensis.*
Papoose root . . . . . *Caulophyllum thalictroides.*
Partridge berry . . . . . *Mitchella repens.*
Pearly everlasting . . . . . *Anaphalis margaritacea*
Peppermint . . . . . *Mentha piperta.*
Pilewort . . . . . *Scrophularia marilandica.*
Pineapple weed . . . . . *Matricaria matricariodes.*
Pipsissewa . . . . . *Chimaphila umbellata.*
Pitcher-plant . . . . . *Sarracenia purpurea.*
Plantain . . . . . *Plantago major.*
Pleurisy root . . . . . *Asclepias tuberosa.*
Pot . . . . . *Cannabis sativa.*
Prickly lettuce . . . . . *Lactuca scariola.*
Prince's pine . . . . . *Chimaphila umbellata.*
Purple trillium . . . . . *Trillium erectum.*
Purple water avens . . . . . *Geum rivale.*
Purplestem angelica . . . . . *Angelica atropurpurea.*
Putty-root . . . . . *Aplectrum hymale.*
Queen anne's lace . . . . . *Daucus carota.*
Raspberry and blackberry . . . . . *Rubus spp.*
Rattleweed . . . . . *Baptisia tinctoria.*
Red clover . . . . . *Trifolium pratense.*
Red puccoon . . . . . *Sanguinaria canadensis.*
Red root . . . . . *Ceanothus americanus.*
Reefer . . . . . *Cannabis sativa.*
Rockbells . . . . . *Aquilegia canadensis.*

Round-leaved pyrola . . . . . *Pyrola routundifolia.*
Rum cherry . . . . . *Prunus serotina.*
Saint john's wort . . . . . *Hypericum perforatum.*
Sang . . . . . *Panax quinquefolius.*
Sassafrass . . . . . *Sassafrass albidum.*
Scrofula plant . . . . . *Scrophylaria marilandica.*
Self-heal . . . . . *Prunella vulgaris.*
Seneca-snakeroot . . . . . *Polygala senega.*
Sharp-lobed hepatica . . . . . *Hepatica acutiloba.*
Shepard's purse . . . . . *Capsella bursa-pastoris.*
Shinleaf . . . . . *Pyrola routundifolia.*
Shovel weed . . . . . *Capsella bursa-pastoris.*
Sidesaddle flower . . . . . *Sarracenia purpurea.*
Silkweed . . . . . *Asclepias syrica.*
Skunk cabbage . . . . . *Symplocarpus foetidus.*
Dracontium . . . . . *Symplocarpus foetidus.*
Snakehead . . . . . *Chelone glabra.*
Solomon's seal . . . . . *Polygonatum biflorum.*
Spearmint . . . . . *Mentha spicata.*
Speckled alder . . . . . *Alnus rugosa.*
Spignet (a. Nudicaulis) . . . . . *Aralia spp.*
Spotted coral root . . . . . *Corallorhiza spp.*
Squaw berry . . . . . *Mitchella repens.*
Squaw plum . . . . . *Mitchella repens.*
Squaw vine . . . . . *Mitchella repens.*
Squawroot . . . . . *Trillium erectum.*
Squirrel corn . . . . . *Dicentra spp.*
Staghorn sumac . . . . . *Rhus spp.*
Star grass . . . . . *Aletris farinosa.*
Star root . . . . . *Chamaelirium lutem.*
Stickers . . . . . *Arctium spp.*
Stinking benjamin . . . . . *Trillium erectum.*
Strawberry . . . . . *Fragaria virginiana.*
Succory . . . . . *Cichorium intybus.*
Swamp alder . . . . . *Alnus rugosa.*
Sweet cicely . . . . . *Osmorhiza longistylis.*
Sweet fern . . . . . *Comptonia peregrina.*
Sweet flag . . . . . *Acorus calamus.*
Tag alder . . . . . *Alnus rugosa.*
Tansy . . . . . *Tanacetum vulgare.*
Teaberry . . . . . *Gaultheria procumbens.*
Thoroughwort . . . . . *Eupatorium perfoliatum.*
Trailing arbutus . . . . . *Epigaea repens.*
Trout lily . . . . . *Erythronium americanum.*

Turtle head . . . . . *Chelone glabra.*
Unicorn plant . . . . . *Aletris farinosa.*
Uva-ursi . . . . . *Arctostaphylos uva-ursi.*
Wake robin . . . . . *Arisamea triphyllum.*
Watercress . . . . . *Nasturtium officinale.*
Water-horehound . . . . . *Lycopus virginicus.*
Waxwork . . . . . *Celastrus scandens.*
White ash . . . . . *Fraxinus americana.*
White cedar . . . . . *Thuja occidentalis.*
White pine . . . . . *Pinus strobus.*
White walnut . . . . . *Juglans cinera.*
Whiteman's foot . . . . . *Plantago major.*
Wild bergamont . . . . . *Monarda fistulosa.*
Wild carrot . . . . . *Daucus carota.*
Wild chamomile . . . . . *Matricaria matricariodes.*
Wild garlic . . . . . *Allium tricoccum.*
Wild geranium . . . . . *Geranium maculatum.*
Wild ginger . . . . . *Asarum canadense.*
Wild indigo . . . . . *Baptisia tinctoria.*
Wild iris . . . . . *Iris versicolor.*
Wild onion . . . . . *Allium tricoccum.*
Wild oregano . . . . . *Monarda fistulosa.*
Wild sarsparilla . . . . . *Aralia spp.*
Wild sherry . . . . . *Prunus serotina.*
Wild tobacco . . . . . *Lobelia inflata.*
Wintergreen . . . . . *Gaultheria procumbens.*
Wintergreen . . . . . *Pyrola routundifolia.*
Witch hazel . . . . . *Hamamelis virginiana.*
Wormwood . . . . . *Artemesia absinthium.*
Yarroway . . . . . *Achillea spp.*
Yarrow . . . . . *Achillea spp.*
Yellow birch . . . . . *Betula allenghaniensis.*
Yellow broom . . . . . *Baptisia tinctoria.*
Yellow dock . . . . . *Rumex crispus.*
Yellow lady's slipper . . . . . *Cypripedium calceolus.*
Yellow parilla . . . . . *Menispermum canadense.*
Yellow puccoon . . . . . *Hydrastis canadensis.*
Yellowroot . . . . . *Hydrastis canadensis.*

FAMILY NAMES — LATIN NAMES

Anacardiaceae . . . . . *Rhus spp.*
Apocynaceae . . . . . *Apocynym spp.*
Araceae . . . . . *Acorus calamus.*
Araceae . . . . . *Arisamea triphyllum.*
Araceae . . . . . *Symplocarpus foetidus.*
Araliaceae . . . . . *Aralia spp.*
Araliaceae . . . . . *Panax quinquefolius.*
Aristolochiaceae . . . . . *Asarum canadense.*
Asclepiadaceae . . . . . *Asclepias syrica.*
Asclepiadiaceae . . . . . *Asclepias tuberosa.*
Berberidaceae . . . . . *Berberis vulgaris.*
Berberidaceae . . . . . *Caulophyllum thalictroides.*
Betulaceae . . . . . *Alnus rugosa.*
Betulaceae . . . . . *Betula allenghaniensis.*
Boraginaceae . . . . . *Cynoglossum officinale.*
Boraginaceae . . . . . *Lithospermum canescens.*
Campanulaceae . . . . . *Lobelia inflata.*
Cannabinaceae . . . . . *Cannabis sativa.*
Cannabinaceae . . . . . *Humulus lupulus.*
Caprifoliaceae . . . . . *Viburnam opulus.*
Celastraceae . . . . . *Celastrus scandens.*
Compositae . . . . . *Achillea spp.*
Compositae . . . . . *Anaphalis margaritacea.*
Compositae . . . . . *Arctium spp.*
Compositae . . . . . *Artemesia absinthium.*
Compositae . . . . . *Cichorium intybus.*
Compositae . . . . . *Erigeron canadensis.*
Compositae . . . . . *Eupatorium purpureum.*
Compositae . . . . . *Eupatorium perfoliatum.*
Compositae . . . . . *Helianthus annuus.*
Compositae . . . . . *Lactuca scariola.*
Compositae . . . . . *Matricaria matricariodes.*
Compositae . . . . . *Tanacetum vulgare.*
Compositae . . . . . *Taraxacum officinale.*
Cruciferae . . . . . *Capsella bursa-pastoris.*
Cruciferae . . . . . *Nasturtium officinale.*
Ericaceae . . . . . *Arctostaphylos uva-ursi.*
Ericaceae . . . . . *Epigaea repens.*
Ericaceae . . . . . *Gaultheria procumbens.*
Fagaceae . . . . . *Fagus spp.*
Fumariaceae . . . . . *Dicentra spp.*

Geraniaceae . . . . . *Geranium maculatum.*
Hamamelidaceae . . . . . *Hamamelis virginiana.*
Hippocastanaceae . . . . . *Aesculus hippocastanum.*
Hypericaceae . . . . . *Hypericum perforatum.*
Iridaceae . . . . . *Iris versicolor.*
Juglandaceae . . . . . *Juglans nigra.*
Juglandaceae . . . . . *Juglans cinera.*
Labiatae . . . . . *Hedeoma pulegiodes.*
Labiatae . . . . . *Leonurus cardiaca.*
Labiatae . . . . . *Lycopus virginicus.*
Labiatae . . . . . *Marrubium vulgare.*
Labiatae . . . . . *Mentha piperta.*
Labiatae . . . . . *Mentha spicata.*
Labiatae . . . . . *Monarda fistulosa.*
Labiatae . . . . . *Nepeta cataria.*
Labiatae . . . . . *Prunella vulgaris.*
Labiatae . . . . . *Scutellaria lateriflora.*
Lauraceae . . . . . *Sassafrass albidum.*
Leguminosae . . . . . *Baptisia tinctoria.*
Leguminosae . . . . . *Medicago sativa.*
Leguminosae . . . . . *Trifolium pratense.*
Lilaceae . . . . . *Pilygonatum biflorum.*
Liliaceae . . . . . *Aletris farinosa.*
Liliaceae . . . . . *Allium tricoccum.*
Liliaceae . . . . . *Chamaelirium lutem.*
Liliaceae . . . . . *Erythronium americanum.*
Liliaceae . . . . . *Trillium erectum.*
Menispermaceae . . . . . *Menispermum canadense.*
Myricaceae . . . . . *Comptonia peregrina.*
Oleaceae . . . . . *Fraxinus americana.*
Orchidaceae . . . . . *Aplectrum hymale.*
Orchidaceae . . . . . *Corallorhiza spp.*
Orchidaceae . . . . . *Cypripedium calceolus.*
Papaveraceae . . . . . *Sanguinaria canadensis.*
Pinaceae. (cupressaceae) . . . . . *Juniperus communis.*
Pinaceae . . . . . *Abies balsamea.*
Pinaceae . . . . . *Pinus strobus.*
Pinaceae . . . . . *Thuja occidentalis.*
Plantaginaceae . . . . . *Plantago major.*
Polygalaceae . . . . . *Polygala senega.*
Polygonaceae . . . . . *Rumex crispus.*
Polypodiaceae . . . . . *Adiantum spp.*
Pyrolaceae. (Ericaceae) . . . . . *Monotropa uniflora.*
Pyrolaceae. (Ericaceae) . . . . . *Pyrola routundifolia.*

Pyrolaceae . . . . . *Chimaphila umbellata.*
Ranunculaceae . . . . . *Actea spp.*
Ranunculaceae . . . . . *Anemone canadensis.*
Ranunculaceae . . . . . *Aquilegia canadensis.*
Ranunculaceae . . . . . *Coptis groenlandica.*
Ranunculaceae . . . . . *Hepatica acutiloba.*
Ranunculaceae . . . . . *Hydrastis canadensis.*
Rhamnaceae . . . . . *Ceanothus americanus.*
Rosaceae . . . . . *Fragaria virginiana.*
Rosaceae . . . . . *Geum rivale.*
Rosaceae . . . . . *Prunus serotina.*
Rosaceae . . . . . *Rubus spp.*
Rubiaceae . . . . . *Galium aparine.*
Rubiaceae . . . . . *Mitchella repens.*
Salicaceae . . . . . *Populus balsamifera.*
Salicaceae . . . . . *Salix spp.*
Sarraceniaceae . . . . . *Sarracenia purpurea.*
Scrophulariaceae . . . . . *Chelone glabra.*
Scrophulariaceae . . . . . *Scrophularia marilandica.*
Scrophulariaceae . . . . . *Verbascum thapsus.*
Solanaceae . . . . . *Solanum dulcamara.*
Typhaceae . . . . . *Typha latifolia.*
Umbelliferae . . . . . *Angelica atropurpurea.*
Umbelliferae . . . . . *Daucus carota.*
Umbelliferae . . . . . *Heracleum lanatum.*
Umbelliferae . . . . . *Osmorhiza longistylis.*

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